

## **Nicolae Victor Zamfir-**

### ***List of Publication - November 2012***

#### **A. List of ISI articles**

1. M. Avrigeanu, V. Avrigeanu, D. Bucurescu, G. Constantinescu, M. Ivascu, D. Pantelica, M. Tanase, N.V. Zamfir  
Lifetime Measurements in  $^{86}\text{Zr}$   
Journal of Physics G4, 261-268 (1978)
2. D.Bucurescu, G. Constantinescu, M.Ivascu, N.V.Zamfir, M.Avrigeanu  
Recoil-distance Measurements of the Lifetimes of High-spin States in  $^{83}\text{Sr}$  and  $^{85}\text{Sr}$   
Journal of Physics G7, 399-413 (1981)
3. D.Bucurescu, G.Constantinescu, M.Ivascu, N.V.Zamfir, M.Avrigeanu, D. Cutoiu,  
Evidence of a  $g_{9/2}$  Decoupled Band in  $^{85}\text{Y}$   
Journal of Physics G7, 667-672 (1981)
4. D. Bucurescu, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V. Zamfir  
Possible Shape Phase Transition in the Heavy Kr Isotopes  
Journal of Physics G7, L123-L126 (1981)
5. D. Bucurescu, G. Cata, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V. Zamfir  
Description of the Neutron-deficient Sr and Zr Isotopes in the Interacting Boson Model  
Nuclear Physics A401, 22-40 (1983)
6. D. Bucurescu, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V. Zamfir, A. Abdel Haliem,  
High-spin States in  $^{86}\text{Y}$   
Journal of Physics G10, 1189-1200 (1983)
7. D. Bucurescu, G. Cata, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V.Zamfir  
IBFA Description of High-Spin Positive-Parity States in Rh Isotopes  
Nuclear Physics A443, 217-236 (1985)
8. D. Bucurescu, G. Cata, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V.Zamfir  
An Extended IBA Consistent-Q Formalism applied to Ru and Pd Isotopes  
Zeitschrift fur Physik A324, 387-392 (1986)
9. D.Bucurescu, G.Cata, M.Ivascu, N.V.Zamfir, C.F.Liang, P.Paris  
Collectivity of the Neutron-deficient odd Yttrium Isotopes  
Journal of Physics G14, L175-L180 (1988)
10. A.F. Barfield, P.von Brentano, A. Dewald, K.O. Zell, N.V. Zamfir, D. Bucurescu,  
M. Ivascu, O. Scholten  
Evidence for the Two-body Nature of the E1 Transition Operator in the  
sdf- Interacting Boson Model  
Zeitschrift fur Physik A332, 29-32 (1989)
11. N.V. Zamfir, R.F. Casten, P.von Brentano  
A Simple Phenomenology for  $3^-_1$  States  
Physics Letters B226, 11-16 (1989)

12. D. Bucurescu, G. Cata, E. Dragulescu, M. Ivascu, N.V. Zamfir, A. Gizon, J. Gizon  
Investigation of the Particle-core Structure of Odd-mass Nuclei in the  $N_pN_n$  Scheme  
Physics Letters B229, 321-326 (1989)
13. G. Cata, D. Bucurescu, D. Cutoiu, M. Ivascu, N.V. Zamfir  
Effective Boson Number Calculations in Mo and Cd Isotopes  
Zeitschrift für Physik A 335, 271-278 (1990)
14. N.V. Zamfir, O. Scholten, P.von Brentano  
E1 Calculations in the sdf-Interacting Boson Model  
Zeitschrift für Physik A 337, 293-296 (1990)
15. N.V. Zamfir, D. Bucurescu, R.F. Casten, M. Ivascu  
A simple Phenomenology for  $2^+_1$  States  
Physics Letters B241 (1990) 463-466
16. D. Bucurescu, G. Cata-Danil, N.V. Zamfir, A. Gizon, J. Gizon  
Description of the Light Barium Isotopes in the IBFA model  
Physical Review C43, 2610-2621 (1991)
17. N.V. Zamfir, R.F. Casten  
Nonpairing like-nucleon valence residual interactions  
Physical Review C43, 2879-2882 (1991)
18. N.V. Zamfir, R.F. Casten  
Signatures of gamma softness or triaxiality in nuclear spectra  
Physics Letters B 260, 265-270 (1991)
19. R.F. Casten, N.V. Zamfir, P.von Brentano, F. Seiffert, W. Lieberz  
Evidence for an f-boson-O(6) coupling from signature splitting effects  
Physics Letters B 265, 9-13 (1991)
20. N.V. Zamfir, P.von Brentano, R.F. Casten  
On a simple formula for the energy of the lowest octupole state  
Annalen der Physik 2, 71-77 (1992)
21. P.von Brentano, N.V.Zamfir, A.Zilges  
E1 operator in the sdf-IBA model from an Alaga rule constraint  
Physics Letters B 278, 221-224 (1992)
22. R.F.Casten, N.V.Zamfir, P.von Brentano and W.T.Chou  
Identical Bands in widely dispersed Nuclei  
Physical Review C45, R1413-R1416 (1992)
23. W.-T.Chou, R.F.Casten, N.V.Zamfir  
Signature splitting in octupole bands of deformed nuclei  
Physical Review C45, R2545-R2547 (1992)
24. N.V.Zamfir, R.F.Casten, P.von Brentano and W.T.Chou  
F-spin Multiplets of O(6) Nuclei  
Physical Review C46, R393-R396 (1992)
25. N.V.Zamfir and P.von Brentano

- E1 transition rates in transitional  $^{148-152}\text{Sm}$  isotopes in the IBA model  
Physics Letters B 289, 245-248 (1992)
26. J.Y.Zhang, R.F.Casten, W.T.Chou, D.S.Brenner, N.V.Zamfir and P. von Brentano  
Identical bands and the varieties of rotational behavior  
Physical Review Letters 69, 1160-1162 (1992)
27. D.S.Brenner, R.F.Casten, W.T.Chou, J.Y.Zhang, K.Heyde and N.V.Zamfir  
Linearity of Nuclear Level Energies with P - factor  
Physics Letters B 293, 282-286 (1992)
28. N.V.Zamfir, A.Dewald, O.Zell and P.von Brentano  
Recoil Distance Lifetime Measurements in  $^{131}\text{La}$   
Zeitschrift für Physik A344, 21-24 (1992)
29. W.T.Chou, R.F.Casten and N.V.Zamfir  
Average Resonance Capture Study of  $^{126}\text{Te}$   
Physical Review C46, 2283-2288 (1992)
30. R.F.Casten, J.Jolie, H. Börner, D.S.Brenner, N.V. Zamfir, W.-T.Chou and A.Aprahamian  
The enigma of  $^{114}\text{Cd}$ : A Classical Case of Quantum Mechanical Ambiguity  
Physics Letters B297, 19-24 (1992)
31. P. von Brentano and N.V. Zamfir  
On a Measure of the Complexity of Nuclear States and the Onset of Chaos  
Physics Letters B297, 219-222 (1992)
32. R.F.Casten and N.V. Zamfir  
Valence Correlation Schemes and Signatures of Nuclear Structure: A Simple Global  
Phenomenology for  $B(E2;2^+_1 \rightarrow 0^+_1)$  Values  
Physical Review Letters 70, 402-405 (1993)
33. A. Jungclaus, H.G.Börner, J.Jolie, S.Ulbig, R.F.Casten, N.V.Zamfir, P.von Brentano  
and K.P.Lieb  
Absolute  $B(E1)$  values in the shape transitional  $^{148-152}\text{Sm}$  isotopes  
Physical Review C47, 1020-1026 (1993)
34. R.F.Casten, W.T.Chou and N.V.Zamfir  
Signature splitting in octupole bands of vibrational and deformed nuclei  
Nuclear Physics A 555, 563-584 (1993)
35. W.-T.Chou, R.F.Casten, R.L.Gill, N.V.Zamfir and D.S.Brenner  
Effective valence spaces and collectivity in neutron deficient Dy-Pt nuclei  
International Journal of Modern Physics E2, 821-826 (1993)
36. N.V.Zamfir and R.F.Casten  
A New Signature for Shape Transitional Regions  
Physics Letters B 305, 317-321 (1993)
37. R.F.Casten, N.V.Zamfir and D.S.Brenner  
Universal Anharmonic Vibrator Description of Nuclei and Critical Nuclear Phase  
Transitions  
Physical Review Letters 71, 227-230 (1993)
38. J.-Y.Zhang, R.F.Casten and N.V.Zamfir

- The Relation of Collective Observables to Nuclear Shapes  
Physical Review C48, R10-R12 (1993)
39. A.Wolf, R.L.Gill, D.S.Brenner, Z.Berant, R.B.Schumann, and N.V.Zamfir  
g-Factor of the  $3/2^+$  93.6 keV Level in  $^{91}\text{Sr}$   
Physical Review C48, 562-565 (1993)
40. N.V.Zamfir, P.D.Cottle, J.L.Johnson and R.F.Casten  
Octupole fragmentation and O(6) symmetry in even-A Pt isotopes  
Physical Review C48, 1745-1751 (1993)
41. A.Jungclaus,T.Belgya, D.P.DiPrete, M.Villani, E.L.Johnson and N.V.Zamfir  
Lifetimes and Electromagnetic Decay Properties of Negative – Parity States in  
 $^{150,152,154}\text{Sm}$  from (n,n'γ) Measurements  
Physical Review C48, 1005-1009 (1993)
42. N.V.Zamfir, P. von Brentano and R.F.Casten  
Phenomenological Systematics for the Onset of Strong Octupole Correlations  
Physical Review C49, R605-R607 (1994)
43. A.Wolf, R.F.Casten, N.V.Zamfir and D.S.Brenner  
Evidence for Phase Transitional Behavior of Even-Even Nuclei from Differential  
Observables  
Physical Review C49, 802-807 (1994)
44. B.D. Foy, R.F. Casten, N.V. Zamfir and D.S. Brenner  
Correlation between  $\epsilon/\Delta$  and the P-factor  
Physical Review C49, 1224-1226 (1994)
45. R.F. Casten, N.V. Zamfir and D.S. Brenner  
A Simple Shell Model Interpretation of the Evolution of Structure in Pre-Collective Nuclei  
Physics Letters B324, 267-272 (1994)
46. R.F.Casten, P. von Brentano and N.V.Zamfir  
Robust Predictions of the Interacting Boson Model  
Physical Review C49, 1940-1948 (1994)
47. W.-T.Chou, R.F.Casten, N.V.Zamfir, D.S.Brenner and D.Bucurescu  
Extension of a Nearly Global Anharmonic Vibrator Description of Nuclei  
to non-yrast States  
Nuclear Physics A580, 33-42 (1994)
48. N.V.Zamfir, R.F.Casten, and D.S.Brenner  
Evolution of Pre-collective Nuclei and a Tripartite Classification of Nuclear Structure  
Physical Review Letters 72, 3480-3483 (1994)
49. D.S.Brenner, N.V.Zamfir, and R.F.Casten  
Evidence for a spherical subshell at N=164  
Physical Review C50, 490-492 (1994)
50. N.Pietralla, P.von Brentano, R.F.Casten, T.Otsuka and N.V.Zamfir  
Distribution of Quadrupole Phonon Strength in Nuclei  
Physical Review Letters 73, 2962-2965 (1994)
51. N.V.Zamfir and R.F.Casten  
Empirical Global Anharmonic Vibrator Spectra and the IBA Model

Physics Letters B341, 1-5 (1994)

52. R.F.Casten and N.V.Zamfir  
Evolution of Pre-collective Nuclei: Structural Signatures near the Drip Line  
Physica Scripta T56, 47-57 (1995)
53. N.V.Zamfir, R.L.Gill, D.S.Brenner, R.F.Casten, and A.Wolf  
Study of low spin states in  $^{122}\text{Cd}$   
Physical Review C51, 98-102 (1995)
54. J.Y.Zhang, N.V.Zamfir and R.F.Casten  
Statistical Investigations of Factors Affecting Rotational Motion in Even-Even Nuclei  
Physical Review C51, R456-R459 (1995)
55. W.T.Chou, R.F.Casten and N.V.Zamfir  
Possible Signatures of Shell Structure Near the Drip Line  
Physical Review C51, 2444-2448 (1995)
56. T.Otsuka, K.H.Kim, N.V.Zamfir and R.F.Casten  
A relation between E2 Matrix Elements connecting Collective States of Deformed Nuclei  
Physics Letters B351, 6-10 (1995)
57. R.L.Gill, C.Barton, R.F.Casten and N.V.Zamfir  
Measurement of the E2 decay branching ratios of the first excited  $0^+$  state in  $^{166}\text{Er}$   
Physical Review C51, 2801-2802 (1995)
58. R.V.Jolos, P.von Brentano, R.F.Casten, and N.V. Zamfir  
An Analytic Interpretation of Universal Anharmonic Vibrator Behavior in the IBA Model  
Physical Review C51, R2298-R2301 (1995)
59. N.V.Zamfir and R.F.Casten  
Anharmonic Vibrator Description of Yrast States of Rotational and Vibrational Nuclei  
Physical Review Letters 75, 1280-1283 (1995)
60. N.V. Zamfir, G. Hering, R.F. Casten, and P. Paul  
Hexadecapole deformations in actinide and trans-actinide nuclei  
Physics Letters B357, 515-520 (1995)
61. R.F.Casten and N.V.Zamfir  
Evidence for a Pervasive Phonon Structure of Nuclear Excitations  
Physics Reports 264, 81-89 (1996)
62. D.Bucurescu, N.V. Zamfir, G. Cata-Danil, M. Ivascu, L. Stroe, C.A. Ur, and R.F. Casten  
Global Correlations of Unique Parity Structures in Odd-A Nuclei  
Physics Letters B376, 1-6 (1996)
63. P.D. Cottle and N.V. Zamfir  
Systematic Behavior of Octupole States in Deformed Rare Earth Nuclei  
and the Interacting Boson Approximation  
Physical Review C54, 176-188 (1996)
64. R.V. Jolos, P.von Brentano, N.V. Zamfir and R.F. Casten  
Simple Formula for  $E(2^+_1)-E(4^+_1)$  correlations and the magnification of structural anomalies  
Physical Review C54, R2146-R2149 (1996)

65. R.F. Casten and N.V. Zamfir  
 The Evolution of Nuclear Structure: The  $N_pN_n$  Scheme and Related Correlations  
 Journal of Physics G - (Topical Review) 22, 1521-1552 (1996)
66. G. Streletz, A. Zilges, N.V. Zamfir, R.F. Casten, D.S. Brenner and Benyuan Liu  
 Valence Correlation Scheme for Single Nucleon Separation Energies  
 Physical Review C54, R2815-R2819 (1996)
67. D.S. Brenner, N.V. Zamfir, and R.F. Casten  
 Reply to "Shell closure at  $N=164$ : Spherical or deformed?"  
 Physical Review C55, 974-975 (1997)
68. C.J. Barton, R.L. Gill, R.F. Casten, D.S. Brenner, N.V. Zamfir and A. Zilges  
 Coulomb Excitation of Radioactive Ion Beams in Inverse Kinematics  
 Nuclear Instruments and Methods in Physics Research A 391, 289-300 (1997)
69. N.V. Zamfir, P.D. Cottle, R.F. Casten, S. Deylitz, A. Gollwitzer, G. Graw, R. Hertenberger,  
 B. Valnion, G. Cata-Danil, Jing-ye Zhang, and W.T. Chou  
 Octupole Fragmentation and the Structure of  $^{134}\text{Ba}$   
 Physical Review C55, R1007-R1010 (1997)
70. J.Y. Zhang, R.F. Casten, and N.V. Zamfir  
 A Structural Triangle for the Geometrical Collective Model  
 Physics Letters B407, 201-206 (1997)
71. W.T. Chou, N.V. Zamfir, and R.F. Casten  
 A Unified Description of Collective Nuclei with the Interacting Boson Model  
 Physical Review C56, 829-838 (1997)
72. N.V. Zamfir, W.T. Chou, and R.F. Casten  
 The evolution of nuclear structure in  $O(6)$  - like nuclei  
 Physical Review C57, 427-429 (1998)
73. H. Lehmann, J. Jolie, F. Corminboeuf, H.G. Börner, C Doll, M. Jentschel, R.F. Casten,  
 and N.V. Zamfir  
 Lifetimes of the lowest  $2^+_{K=0}$  levels in  $^{168}\text{Er}$  and  $^{164}\text{Dy}$   
 Physical Review C57, 569-576 (1998)
74. R.F. Casten, M. Wilhelm, E. Radermacher, N.V. Zamfir, and P. von Brentano  
 The first excited  $0^+$  state in  $^{152}\text{Sm}$   
 Physical Review C57, R1553-R1557 (1998)
75. B.D. Foy, D.S. Brenner, C.N. Davids, D. Seweryniak, D. Blumenthal, R.L. Gill, N.V. Zamfir,  
 D.D. Warner, and C.J. Barton  
 Mass measurements of proton-rich medium mass nuclides  
 Physical Review C58, 749-753 (1998)
76. F. Iachello, N.V. Zamfir, and R.F. Casten  
 Phase Coexistence in Transitional Nuclei and the Interacting Boson Model  
 Physical Review Letters 81, 1191-1194 (1998)
77. P.D. Cottle and N.V. Zamfir  
 Octupole states in deformed actinide nuclei with the interacting boson approximation

Physical Review C58, 1500-1514 (1998)

78. G. Cata-Danil, R.F. Casten, and N.V. Zamfir  
Trajectories of ground state (p,t) cross sections and the structural classification of nuclei  
Physical Review C58, R3060-R3063 (1998)
79. H.G. Börner, M. Jentschel, N.V. Zamfir, R.F. Casten, M. Krticka, and W. Andrejtscheff  
Ultrahigh Resolution Study of Collective Modes in  $^{158}\text{Gd}$   
Physical Review C59, 2432-2439 (1999)
80. R. Krücken, C. Barton, C.W. Beausang, R.F. Casten, J.R. Cooper, J. Novak, L. Yang,  
M. Wilhelm, N.V. Zamfir, A. Zilges  
Nature of excited  $0^+$  states in  $^{154}\text{Sm}$   
Physics Letters B 454, 15-21 (1999)
81. R.F. Casten, D. Kuznezov, and N.V. Zamfir  
Phase Transitions in Finite Nuclei and the Integer Nucleon Number Problem  
Physical Review Letters 82, 5000-5003 (1999)
82. J.R. Novak, C.W. Beausang, N. Amzal, R.F. Casten, G. Cata, J. Cocks, J. Cooper,  
P.T. Greenlees, F. Hannachi, K. Helariutta, P. Jones, R. Julin, S. Juutinen, H. Kankaanpää,  
Kettunen, R. Krücken, P. Kuusiniemi, M. Leino, B. Liu, M. Muikku, A. Savelius,  
J.T. Thomas, N.V. Zamfir, Jing-ye Zhang, S. Fraundorf  
High spin states in  $^{205}\text{Rn}$ : A new magnetic rotor?  
Physical Review C59, R2989-R2992 (1999)
83. Jing-ye Zhang, R.F. Casten, and N.V. Zamfir  
Q-invariants in the Geometric Collective Model  
Physical Review C 60, 021304 (1999)
84. D. Bucurescu, N.V. Zamfir, R.F. Casten, and W.T. Chou  
Generalized correlations of quasiband energies in nuclei  
Physical Review C 60, 044303 (1999)
85. N.V. Zamfir, R.F. Casten, M.A. Caprio, C.W. Beausang, R. Krücken, J.R. Novak,  
J.R. Cooper, G. Cata-Danil, and C.J. Barton  
 $B(E2)$  values and phase coexistence in  $^{152}\text{Sm}$   
Physical Review C 60, 054312 (1999)
86. N.V. Zamfir, R.F. Casten, Benyuan Liu, D.S. Brenner, C.J. Barton, R. Krücken, C.W.  
Beausang, J.R. Novak, J.R. Cooper, R.L. Gill, and D.D. Warner  
Status of the  $K=0^+_2$  band in  $^{162}\text{Dy}$   
Physical Review C 60, 054319 (1999)
87. Jing-ye Zhang, M.A. Caprio, N.V. Zamfir, and R.F. Casten  
Phase/shape coexistence in  $^{152}\text{Sm}$  in the geometric collective model  
Physical Review C 60, 061304 (1999)
88. C. Günther, R. Krücken, C.J. Barton, C.W. Beausang, R.F. Casten, G. Cata-Danil,  
J.R. Cooper, J. Gröger, J. Novak, and N.V. Zamfir  
Coulomb excitation of vibrational states in  $^{232}\text{Th}$  with  $^{16}\text{O}$  projectiles  
Physical Review C 61, 064602 (2000)
89. D.E. Appelbe, C.W. Beausang, C.J. Barton, M. Caprio, R.F. Casten, J. Cederkäll,  
J.R. Cooper, R. Krücken, J.R. Novak, N.V. Zamfir, and Z. Wang

Evidence for Superdeformation in  $^{149,150}\text{Dy}$ : Onset of the collapse of the Z=66 deformed shell closure?

Physical Review C61, 037303 (2000)

90. A.M. Bruce, J. Simpson, D.D. Warner, C. Baktash, C.J. Barton, M.A. Bentley, M.J. Brinkman, R.A. Cunningham, E. Dragulescu, L. Frankland, C.J. Gross, R.C. Lemmon, B. MacDonald, C.D. O'Leary, S.M. Vincent, A Wright, R. Wyss, C.H. Yu, and N.V. Zamfir  
Two-neutron alignment and shape changes in  $^{69}\text{As}$   
Physical Review C 62 (2000) 027303
91. R.F. Casten, J.Y. Zhang, N.V. Zamfir, Haibin Zhang, and Fei Du  
Morphologically distinct trajectories of structural evolution in nuclei and their empirical signatures  
Physics Letters B481, 1-6 (2000)
92. C.W. Beausang, C.J. Barton, M. Caprio, R.F. Casten, J.R. Cooper, R. Krücken, B. Liu, J.R. Novak, Z. Wang, A.N. Wilson, N.V. Zamfir, A. Zilges, M. Wilhelm.  
The YRAST Ball Array  
Nuclear Instruments and Methods in Physical Research. A452, 431-439 (2000)
93. W.T. Chou, N.V. Zamfir, R.F. Casten  
Simplified approach to interacting boson approximation-2 calculations using Hamiltonian invariants  
Physical Review C 62, 011301(R) (2000)
94. Dimitri Kusnezov, N.V. Zamfir, and R.F. Casten  
Robust Nuclear Observables and Constraints on Random Interactions  
Physical Review Letters 85, 1396-1399 (2000)
95. R.F. Casten and N.V. Zamfir  
Evidence for a possible E(5) symmetry in  $^{134}\text{Ba}$   
Physical Review Letters 85, 3584-3586 (2000)
96. L. Genilloud, J. Jolie, H.G. Börner, H. Lehmann, F. Becvar, M. Krticka, N.V. Zamfir, and R.F. Casten  
Lifetimes of negative parity states in  $^{168}\text{Er}$   
Physical Review C62, 034313 (2000)
97. B.E. Tomlin, C.J. Barton, N.V. Zamfir, M.A. Caprio, R.L. Gill, R. Krücken, J.R. Cooper, J.R. Novak, K.E. Zyromski, G. Cata-Danil, C.W. Beausang, A. Wolf, N.A. Pietralla, H. Newman, J. Cederkäll, Benyuan Liu, Z. Wang, R.F. Casten, and D.S. Brenner  
Mass measurements of  $^{70}\text{Se}$ ,  $^{71}\text{Se}$ ,  $^{72}\text{Br}$ , and  $^{73}\text{Br}$   
Physical Review C63, 034314 (2001)
98. K. Starosta, T. Koike, C. Chiara, D.B. Fossan, D. LaFosse, A. Hecht, C.W. Beausang, M.A. Caprio, J.R. Cooper, R. Krücken, J.R. Novak, N.V. Zamfir, K.E. Zyromski, D. Hartley, D. Balabanski, J.Y. Zhang, S. Frauendorf, and V.I. Dimitrov  
Chiral doublet structures in odd-odd N=75 isotones: chiral vibrations  
Physical Review Letters 86, 971-974 (2001)
99. C.W. Beausang, A.A. Hecht, K.E. Zyromski, D. Balabanski, C.J. Barton, M.A. Caprio, R.F. Casten, J.R. Cooper, D. Hartley, R. Krücken, J.R. Novak, N.V. Zamfir, J.Y. Zhang, and F. Dönau  
Evidence for chiral symmetry in the mass A~130 region  
Nuclear Physics A682, 394-398 (2001)

100. A. Hecht, C. W. Beausang, K. Zyromski, D. Balabanski, C.J. Barton, M.A. Caprio, R.F. Casten, J.R. Cooper, E.S. Paul, D. Hartley, R. Krücken, H. Newman, J.R. Novak, N.V. Zamfir, J.Y. Zhang, and F. Dönau  
Evidence for Chiral Symmetry in  $^{136}\text{Pm}$  and  $^{138}\text{Eu}$   
Physical Review C63, 051302(R) (2001)
101. N. V. Zamfir and D. Kusnezov  
Octupole Correlations in the transitional Actinides and the spdf - Interacting Boson Model  
Physical Review C63, 054306 (2001)
102. Jing-ye Zhang, N.V. Zamfir, R.F. Casten, and M.A. Caprio  
Random interactions in the geometric collective model and the E(5) potential  
Physical Review C64, 017302 (2001)
103. C.Y. Wu, D. Cline, A.B. Hayes, M.W. Simon, R. Kruecken, J.R. Cooper, C.J. Barton, C.W. Beausang, M.A. Caprio, R.F. Casten, A.A. Hecht, H. Newman, J.R. Novak, N. Pietralla, K.E. Zyromski, and N.V. Zamfir  
Two-phonon  $\gamma$ -vibrational strength in osmium nuclei  
Physical Review C64, 014307 (2001)
104. N. Pietralla, C.J. Barton, C.W. Beausang, M.A. Caprio, R.F. Casten, J.R. Cooper, A.A. Hecht, R. Krücken, J.R. Novak, and N.V. Zamfir  
Coulomb excitation of the  $2^+_{\text{ms}}$  state of  $^{96}\text{Ru}$  in inverse kinematics  
Physical Review C64, 031301 (2001)
105. R.F. Casten and N.V. Zamfir  
Empirical Realization of a Critical Point Description in Atomic Nuclei  
Physical Review Letters 87, 052503 (2001)
106. R. Krücken, W.T. Chou, J.R. Cooper, C.J. Barton, C.W. Beausang, M.A. Caprio, R.F. Casten, A.A. Hecht, J.R. Novak, N. Pietralla, A. Wolf, and N.V. Zamfir  
Lifetimes in neutron-rich fission fragments using the recoil distance method  
Physical Review C64, 017305 (2001)
107. H. Newman, J.R. Novak, C.J. Barton, M.A. Caprio, R.F. Casten, J.R. Cooper, A. Hecht, R. Krücken, N. Pietralla, A. Wolf, N.V. Zamfir, J.Y. Zhang, K. Zyromski, J. Saladin, I. Birriel  
High-Spin States in  $^{203}\text{Rn}$   
Physical Review C64, 027304 (2001)
108. W.T. Chou, G. Cata-Danil, N.V. Zamfir, R.F. Casten, and N. Pietralla  
Collective  $0^+$  excitations and their global properties  
Physical Review C64, 057301 (2001)
109. P. Cejnar, W.T. Chou, N.V. Zamfir, and R.F. Casten  
Equivalent potentials of the geometric collective model and interacting boson model  
Physical Review C64, 054305 (2001)
110. N. Pietralla, R. Kruecken, C. Barton, C. Beausang, M.A. Caprio, R.F. Casten, J. Cooper, A. Hecht, J. Novak, N.V. Zamfir, A. Lisetsky, and A. Schmidt  
Lifetime of quasideuteron configurations in the odd-odd N=Z nucleus  $^{50}\text{Mn}$   
Physical Review C65, 024317 (2002)

111. N.V. Zamfir, M.A. Caprio, R.F. Casten, C.J. Barton, C.W. Beausang, Z. Berant, D.S. Brenner, W.T. Chou, J.R. Cooper, A.A. Hecht, R. Kruecken, H. Newman, J.R. Novak, N. Pietralla, A. Wolf, and K.E. Zyromski  
 $^{102}\text{Pd}$ : an E(5) Nucleus?  
Physical Review C65, 044325 (2002)
112. D.C. Radford, C. Baktash, J.R. Beene, B. Fuentes, A. Galindo-Uribarri, C.J. Gross, P.A. Hausladen, T.A. Lewis, P.E. Mueller, E. Padilla, D. Shapira, D.W. Stracener, C.H. Yu, C.J. Barton, M. A. Caprio, L. Corragio, A. Covello, A. Gargano, D.J. Hartley, and N.V. Zamfir  
Coulomb Excitation of Radioactive  $^{132,134,136}\text{Te}$  Beams and the Low B(E2) of  $^{136}\text{Te}$   
Physical Review Letters 88, 222501 (2002)
113. R. Krücken, B. Albanna, C. Bialik, R.F. Casten, J.R. Cooper, A. Dewald, N.V. Zamfir, C.J. Barton, C.W. Beausang, M.A. Caprio, A.A. Hecht, T. Klug, J.R. Novak, N. Pietralla, and P. von Brentano  
B(E2) values in  $^{150}\text{Nd}$  and the Critical point Symmetry X(5)  
Physical Review Letters 88, 232501 (2002)
114. N.V. Zamfir, H.G. Boerner, N. Pietralla, R.F. Casten, Z. Berant, C.J. Barton, C.W. Beausang, D.S. Brenner, M.A. Caprio, J.R. Cooper, A.A. Hecht, M. Krticka, R. Krücken, P. Mutti, J.R. Novak, and A. Wolf  
Lifetime and B(E2) value from the  $3^+$  level in  $^{152}\text{Sm}$   
Physical Review C65, 067305 (2002)
115. A. Wolf, N.V. Zamfir, M.A. Caprio, Z. Berant, D.S. Brenner, N. Pietralla, R.L. Gill, R.F. Casten, C.W. Beausang, R. Krücken, K.E. Zyromski, C.J. Barton, A.A. Hecht, H. Newman, J.R. Novak, and J. Cederkäll  
Structure of low-lying states in  $^{128}\text{Ba}$  from  $\gamma$ - $\gamma$  correlations and polarizat measurements  
Physical Review C66, 024323 (2002)
116. M.A. Caprio, R.F. Casten, N.V. Zamfir, G.C. Ball, K.P. Jackson, P.A. Amaudruz, and J.C. Thomas  
Properties of the low-lying  $K=0^+$  excitations in  $^{162}\text{Er}$   
Physical Review C66, 014307 (2002)
117. C.Y. Wu, D. Cline, A.B. Hayes, M.W. Simon, R. Krücken, J.R. Cooper, C.J. Barton, C.W. Beausang, C. Bialik, M.A. Caprio, R.F. Casten, A.A. Hecht, H. Newman, J. Novak, N. Pietralla, K. Zyromski, and N.V. Zamfir  
Reply to Comment on ‘Two-phonon gamma-vibrational strength in osmium nuclei  
Physical Review C 66, 039802, 039802 (2002)
118. A.D. Yamamoto, P.H. Regan, C.W. Beausang, F.R. Xu, M.A. Caprio, R.F. Casten, G. Guerdel, A.A. Hecht, C. Hutter, R. Krücken, S.D. Langdown, D. Meyer, J.J. Ressler, and N.V. Zamfir  
High-j proton and neutron alignment in gamma-soft  $^{101}\text{Ru}$   
Physical Review C66, 024302 (2002)
119. Zs. Podolyak, S. Al-Garni, R.F. Casten, J.R. Cooper, D.M. Cullen, A. Dewald, R. Krücken, H. Newman, J.N. Orce, C.J. Pearson, C. Ur, R. Venturelli, S. Vincent, C. Wheldon, P.M. Walker, F.R. Xu, A. Yamamoto, and N.V. Zamfir  
Deviation from axial symmetry in  $^{181}\text{Os}$   
Physical Review C 66, 011304R (2002)

120. N.V. Zamfir, P. von Brentano, R.F. Casten, and J. Jolie  
 Test of two level crossing at the N=90 spherical-deformed critical point  
*Physical Review C*66, 021304R (2002)
121. M.A. Caprio, N.V. Zamfir, R.F. Casten, C.J. Barton, C.W. Beausang, J.R. Cooper, A.A. Hecht, R. Krücken, H. Newman, J.R. Novak, N. Pietralla, A. Wolf, and K. Zyromski.  
 Low-spin structure of  $^{156}\text{Dy}$  through gamma-ray spectroscopy  
*Physical Review C* 66, 054310 (2002)
122. N.V. Zamfir, J.Y. Zhang, and R.F. Casten  
 Interpreting Recent Measurements of  $0^+$  states in  $^{158}\text{Gd}$   
*Physical Review C* 66, 057303 (2002)
123. D.C. Radford, C. Baktash, A. Galindo-Uribarri, C.J. Gross, T.A. Lewis, P.E. Mueller, P.A. Hausladen, D. Shapira, D.W. Stracener, C.-H. Yu, B. Fuentes, E. Padilla, D.J. Hartley, C.J. Barton, M. Caprio, and N.V. Zamfir  
 Physics with Heavy Neutron-Rich RIBs at the HRIBF  
*European Physical Journal A*15, 171-173 (2002)
124. N.V. Zamfir and D. Kusnezov  
 Octupole correlations in U and Pu nuclei  
*Physical Review C* 67, 014305 (2003)
125. M.A. Caprio, N.V. Zamfir, E.A. McCutchan, R.F. Casten, Z. Berant, H. Amro, C.J. Barton, C.W. Beausang, D.S. Brenner, J.R. Cooper, R.L. Gill, G. Gurdal, A.A. Hecht, C. Hutter, R. Krücken, D.A. Meyer, J.R. Novak, N. Pietralla, P.H. Regan, and J.J. Ressler.  
 Measurement of  $2^+_1$  level lifetimes in  $^{162}\text{Yb}$  and  $^{162}\text{Er}$  by fast electronic scintillation timing  
*European Physical Journal A* 16, 177-180 (2003)
126. D.E. Appelbe, C.J. Barton, M.H. Muikku, J. Simpson, D.D. Warner, C.W. Beausang, M.A. Caprio, J.R. Cooper, J.R. Novak, N.V. Zamfir, R. Austin, J.A. Cameron, C. Malcolmson, J. Waddington, and F.R. Xu  
 Detailed  $\gamma$ -ray spectroscopy of  $^{55}\text{Cr}$  and  $^{56}\text{Cr}$ : Confirmation of sub-shell closure at N=32  
*Physical Review C* 67, 034309 (2003)
127. C.J. Barton, D.S. Brenner, N.V. Zamfir, M.A. Caprio, A. Aprahamian, M.C. Wiescher, C. W. Beausang, Z. Berant, R.F. Casten, J.R. Cooper, R.L. Gill, R. Krücken, J.R. Novak, N. Pietralla, M. Shawcross, A. Teymurazyan, and A. Wolf  
 Mass measurement of  $^{80}\text{Y}$  by beta-gamma coincidence spectroscopy  
*Physical Review C* 67, 034310 (2003)
128. C.J. Barton, M.A. Caprio, D. Shapira, N.V. Zamfir, D.S. Brenner, R.L. Gill, T.A. Lewis, J.R. Cooper, R.F. Casten, C.W. Beausang, R. Krücken, and J.R. Novak  
 B(E2) values from low-energy Coulomb excitation at an ISOL facility:  
 The N=80, 82 Te isotopes  
*Physics Letters B* 551, 269-276 (2003)
129. P.H. Regan, C.W. Beausang, N.V. Zamfir, R.F. Casten, J.Y. Zhang, A.D. Yamamoto, M.A. Caprio, G. Gurdal, A. Hecht, C. Hutter, R. Krücken, S.D. Langdown, D. Meyer, J.J. Ressler  
 A Signature for vibrational to rotational evolution along the yrast line  
*Physical Review Letters* 90, 152502 (2003)

130. C. Hutter, R. Kruecken, A. Aprahamian, C.J. Barton, C.W. Beausang, M.A. Caprio, R.F. Casten, W.T. Chou, R.M. Clark, D. Cline, J.R. Cooper, M. Cromaz, A.A. Hecht, A. O. Macchiavelli, N. Pietralla, M. Showcross, M.A. Stoyer, C.Y. Wu, and N.V. Zamfir  
 $B(E2)$  values and the search for the critical point symmetry X(5) in  $^{104}\text{Mo}$  and  $^{106}\text{Mo}$   
*Physical Review C* 67, 054315 (2003)
131. R.F. Casten, E.A. McCutchan, N.V. Zamfir, C.W. Beausang, and Jing-ye Zhang  
 Wobbling motion: a gamma-rigid or gamma-soft mode?  
*Physical Review C* 67, 064306 (2003)
132. J.J. Ressler, R. Kruecken, C.W. Beausang, J.M. D'Auria, H. Amro, M.A. Caprio, G. Guerdal, C. Hutter, A.A. Hecht, D. Meyer, M. Sciacciatano, N.V. Zamfir  
 SASSYER: An old instrument for new physics at Yale  
*Nuclear Instruments and Methods in Physics Research B* 204, 141-145 (2003)
133. M. Danchev, D. Balabanski, I. Yigitoglu, C. Beausang, R.F. Casten, M. Djongolov, M. Erduran, S. Ertuk, K. Gladnishki, G. Gurdal, J. Goon, D. Hartley, A. Hecht, R. Krücken, J.R. Novak, Y. Oktem, G. Rainovski, L.L. Riedinger, N.V. Zamfir, and O. Zeidan  
 Delayed backbending in  $\pi\theta_{9/2}$  band of  $^{187}\text{Ir}$   
*Physical Review C* 68, 054307 (2003)
134. R. F. Casten, N.V. Zamfir, and R. Krücken  
 Comment on “Reexamination of the N=90 transitional nuclei  $^{150}\text{Nd}$  and  $^{152}\text{Sm}$   
*Physical Review C* 68, 059801 (2003)
135. R. Bijker, R.F. Casten, N.V. Zamfir, and E.A. McCutchan  
 A test of X(5) for the  $\gamma$  degree of freedom  
*Physical Review C* 68, 064304 (2003)
136. E.A. McCutchan, N.V. Zamfir, M.A. Caprio, R.F. Casten, H. Amro, C.W. Beausang, D.S. Brenner, A.A. Hecht, C. Hutter, S.D. Langdown, D.A. Meyer, P.H. Regan, J.J. Ressler, A.D. Yamamoto  
 Low spin states in  $^{162}\text{Yb}$  and the X(5) critical point symmetry  
*Physical Review C* 69, 024308 (2004)
137. A.A. Hecht, C.W. Beausang, H. Amro, C.J. Barton, Z. Berant, M.A. Caprio, R.F. Casten, J.R. Cooper, D. Hartley, R. Krücken, D. Meyer, H. Newman, J. Novak, N. Pietralla, J.J. Ressler, A. Wolf, N.V. Zamfir, J.Y. Zhang, and K. Zyromski  
 Evidence for Chiral Symmetry Breaking in  $^{140}\text{Eu}$   
*Physical Review C* 68, 054310 (2003)
138. J.J. Ressler, R.F. Casten, N.V. Zamfir, C.W. Beausang, R.B. Cakirli, H. Ai, H. Amro, M.A. Caprio, A.A. Hecht, A. Heinz, S.D. Langdown, E.A. McCutchan, D.A. Meyer, C.Plettner, P.H. Regan, M.J.S. Sciaccitano, A.D. Yamamoto  
 Transition from the Seniority Regime to Collective Motion  
*Physical Review C* 69, 034317 (2004)
139. Z. Berant, A. Wolf, N.V. Zamfir, M.A. Caprio, D.S. Brenner, N. Pietralla, R.L. Gill, R.F. Casten, C. Beausang, R. Krücken, C.J. Barton, J.R. Cooper, A.A. Hecht, D. Johnson, J.R. Novak, H. Cheng, B. Albanna, and G. Gurdal  
 $g$ -factor of the  $2^+_1$  state of  $^{164}\text{Yb}$   
*Physical Review C* 69, 034320 (2004)

140. H.F. Wirth, G. Graw, S. Christen, D. Cutoiu, Y. Eisermann, G. Guenther, R. Hertenberger, J.Jolie, A.I. Levon, O Mueller, G. Thiamova, P. Thirolf, D. Tonev, and N.V. Zamfir  
 Study of  $0^+$  states in deformed actinide nuclei by the (p,t) reaction  
*Physical Review C* 69, 044310 (2004)
141. P. von Brentano, N.V. Zamfir, R.F. Casten, W.G. Rellergert, and E.A. McCutchan  
 A new yrast energy formula for soft rotors  
*Physical Review C* 69, 044314 (2004)
142. J.J. Ressler, C.W. Beasang, H. Ai, H. Amro, M.A. Caprio, R.F. Casten, A.A. Hecht, S.D. Langdown, E.A. McCutchan, D.A. Meyer, P.H. Reagan, M.J.S. Sciacchitano, A. Yamamoto, and N.V. Zamfir  
 Isomer Decay Tagging in the Heavy Nuclei:  $^{210}\text{Ra}$  and  $^{209}\text{Ra}$   
*Physical Review C* 69, 034331 (2004)
143. E.A. McCutchan, N.V. Zamfir, R.F. Casten  
 Mapping the IBA Symmetry Triangle: New Trajectories of Structural Evolution of Rare-Earth Nuclei  
*Physical Review C* 69, 064306 (2004)
144. F. Iachello and N.V. Zamfir  
 Quantum phase transitions in mesoscopic systems  
*Physical Review Letters* 92, 212501 (2004)
145. R.O. Hughes, N.V. Zamfir, R.F. Casten, D.C. Radford, C.J. Barton, C. Baktash, M.A. Caprio, A. Galindo-Uribarri, C.J. Gross, P.A. Hausladen, E.A. McCutchan, J.J. Ressler, D. Shapira, D.W. Stracener, C.H. Yu  
 Test of Calculations with single-particle density dependent pairing in  $^{132}\text{Te}$   
*Physical Review C* 69, 051303R (2004).
146. J. Jolie, R.F. Casten, P. Cejnar, H. Heize, E.A. McCutchan, and N.V. Zamfir  
 Experimental Confirmation of the Alhassid-Whelan Arc of Regularity  
*Physical Review Letters* 93, 132501 (2004)
147. D. Balabanski, M. Danchev, D. Hartley, L.L. Riedinger, O. Zeiden, J.Y. Zhang, C.J. Barton, C. Beausang, M. Caprio, R.F. Casten, J.R. Cooper, A. Hecht, R. Krücken, J.R. Novak, N.V. Zamfir, and K.E. Zyromski  
 Possible assignment of Chiral twin bands in  $^{188}\text{Ir}$   
*Physical Review C* 70, 044305 (2004)
148. R.B. Cakirli, R.F. Casten, E.A. McCutchan, H. Ai, H. Amro, M. Babilon, C.W. Beasang, A. Heinz, R.O. Hughes, D.A. Meyer, C. Plettner, J.J. Ressler, and N.V. Zamfir  
 Breakdown of vibrational structure in  $^{98}\text{Ru}$   
*Physical Review C* 70, 044312 (2004)
149. J.J. Ressler, C.W. Beasang, H. Ai, H. Amro, M. Babilon, J.A. Caggiano, R.F. Casten, G. Gurdal, A. Heinz, R.O. Hughes, E.A. McCutchan, D.A. Meyer, C. Plettner, J. Qian, M.J.S. Sciacchitano, N.J. Thomas, E. Williams , and N.V. Zamfir  
 Isomeric Decay of  $^{208}\text{Ra}$   
*Physical Review C* 71, 014302 (2005)

150. K. Kaneko, R.F. Casten, M. Hasegawa, T. Mizusaki, J.Y. Zhang, E.A. McCutchan, N.V. Zamfir, and R. Kruecken  
**Anomalous behavior of the first excited  $0^+$  state in N=Z nuclei**  
Physical Review C 71, 014319 (2005)
151. E.A. McCutchan, N.V. Zamfir, R.F. Casten, M.A. Caprio, H. Ai, H. Amro, C.W. Beausang, A.A. Hecht, D.A. Meyer, J.J. Ressler  
**Gamma-ray spectroscopy of  $^{166}\text{Hf}$ : X(5) in N>90?**  
Physical Review C 71, 024309 (2005)
152. E.A. McCutchan, N.V. Zamfir, and R.F. Casten  
**Bridging the gap between X(5) and the IBA**  
Physical Review C 71, 034309 (2005)
153. R.O. Hughes, N.V. Zamfir, D.C. Radford, C.J. Barton, C. Baktash, M.A. Caprio, R.F. Casten, A. Galindo-Uribarri, C.J. Gross, P.A. Hausladen, E.A. McCutchan, J.J. Ressler, D. Shapira, D.W. Stracener, C.H. Yu  
**Gamma-ray spectroscopy of  $^{132}\text{Te}$  through beta decay of  $^{132}\text{Sb}$  radioactive beam**  
Physical Review C 71, 044311 (2005)
154. N.J. Stone, A.E. Stuchbery, M. Danchev, J. Pavan, C.L. Timlin, C. Baktash, C.Barton, J. Beene, N. Benczer-Koller, C.R. Bingham, J. Dupak, A. Galindo-Uribarri, C.J. Gross, G. Kumbartzki, D.C. Radford, J.R. Stone,, and N.V. Zamfir  
**First Nuclear Moment Measurement with Radioactive Beams by Recoil-in-Vacuum Technique: The g factor of the  $2^+_1$  state in  $^{132}\text{Te}$**   
Physical Review Letters 94, 192501 (2005)
155. E.A. McCutchan and N.V. Zamfir  
**Simple Description of light W, Os, and Pt nuclei in the Interacting Boson Model**  
Physical Review C 71, 054306 (2005)
156. E.A. McCutchan, R.F. Casten, and N.V. Zamfir  
**Simple Interpretation of Shape Evolution in Pt isotopes without intruder states”**  
Physical Review C 71, 061301 (R) (2005)
157. A. Wolf, Z. Berant, N.V. Zamfir, E.A. McCutchan, A. Heinz, R.F. Casten, C. Plettner, N. Pietralla, H. Ai, K. Dusling, D.A. Meyer, J. Qian, J. Vinsen, R. Winkler, D. Swanson, E. Williams, and P.H. Reagan  
**g factor of the  $2^+_1$  state of  $^{160}\text{Er}$**   
Physical Review C 72, 027301 (2005)
158. M. Babilon, N.V. Zamfir, D. Kusnezov, E.A. McCutchan, and A. Zilges  
**Octupole correlations in the Sm isotopes**  
Physical Review C 72, 064302 (2005)
159. M. Danchev, J. Pavan, N.J. Stone, A.E. Stuchbery, C. Baktash, J. Beene, N. Benczer-Koller, C.R. Bingham, J. Dupak, A. Galindo-Uribarri, C.J. Gross, G. Kumbartzki, D.C. Radford, J.R. Stone, C.L. Timlin, C.H. Yu, and N.V. Zamfir  
**g-factor measurement of first 2+ states of heavy Te isotopes based on nuclear spin deorientation for nuclei recoiling in vacuum**  
Nuclear Instruments and Methods in Physics Research B 241, 971-976 (2005)

160. D.A. Meyer, C.W. Beausang, J.J. Ressler, H. Ai, H. Amro, M. Babilon, R.F. Casten, C.R. Fitzpatrick, G. Gurdal, A. Heinz, E.A. McCutchan, C. Plettner, J. Qian, N.J. Thomas, V. Werner, E. Williams, N.V. Zamfir, and Jing-ye Zhang  
 First investigation of excited states in the odd-proton nucleus  $^{209}\text{Fr}$   
*Physical Review C* 73, 024307 (2006)
161. E.A. McCutchan, N.V. Zamfir, R.F. Casten, H. Ai, H. Amro, M. Babilon, D.S. Brenner, G. Gurdal, A. Heinz, R.O. Hughes, D.A. Meyer, C. Plettner, J. Qian, J.J. Ressler, N.J. Thomas, V. Werner, E. Williams, and R. Winkler  
 Lifetime measurements of yrast levels in  $^{162}\text{Yb}$  and  $^{166}\text{Hf}$   
*Physical Review C* 73, 034303 (2006)
162. H.G. Borner, P. Mutti, M. Jentschel, N.V. Zamfir, R.F. Casten, E.A. McCutchan, and R. Kruecken  
 Low-energy phonon structure of  $^{150}\text{Sm}$   
*Physical Review C* 73, 034314 (2006)
163. J.Y. Zhang, R.F. Casten, A. Wolf, Z. Berant, R.B. Cakirli, N.V. Zamfir, E.A. McCutchan  
 Consistent Interpretation of B(E2) Values and g Factors in Deformed Nuclei  
*Physical Review C* 73, 037301 (2006)
164. E. Williams, C. Plettner, E.A. McCutchan, H. Levine, N.V. Zamfir, R.B. Cakirli, R.F. Casten, H. Ai, C.W. Beausang, G. Gurdal, A. Heinz, J. Quin, D.A. Meyer, N. Pietralla, and V. Werner  
 Revisiting B(E2;  $4^+_1 - 2^+_1$ )/B(E2;  $2^+_1 - 0^+_1$ ) values in  $^{98}\text{Ru}$  and  $^{180}\text{Pt}$   
*Physical Review C* 74, 024302 (2006)
165. E.A. McCutchan, Dennis Bonatsos, and N.V. Zamfir  
 Connecting the X(5)- $\beta_2$ , X(5)- $\beta_4$ , and X(3) models to the shape/phase-transition region of the interacting boson model  
*Physical Review C* 74, 034306 (2006)
166. Ch. Hinke, R. Kruecken, R.F. Casten, V. Werner, and N.V. Zamfir  
 Evolution of  $2^+_\gamma$  wave functions and gamma-stiffness in well-deformed rare-earth nuclei  
*Eur. Phys. J. A* 30 (2006) 357-367
167. C. Mihai, N.V. Zamfir, D. Bucurescu, G. Cata-Danil, I. Cata-Danil, D.G. Ghita, M. Ivascu, T. Sava, L. Stroe, and G. Suliman  
 $\gamma$ -band staggering and E(5)-type structure:  $^{64}\text{Zn}$   
*Physical Review C* 75, 044302 (2007)
168. E.A. McCutchan, Dennis Bonatsos, and N.V. Zamfir  
 Connecting the X(5)- $\beta^2$ , X(5)- $\beta^4$ , and X(3) models to the shape/phase transition region of the Interacting Boson Model  
*Physics of Atomic Nuclei* 70, 1462-1469 (2007)
169. E.A. McCutchan, Dennis Bonatsos, N.V. Zamfir and R.F. Casten  
 Staggering in  $\gamma$ -band energies and the transition between different structural symmetries in nuclei  
*Physical Review C* 76, 024306 (2007)

170. Y. Oktem, D. L. Balabanski, B. Akkus, C. W. Beausang, M. Bostan, R. B. Cakirli, R. F. Casten, M. Danchev, M. Djongolov, M. N. Erduran, S. Erturk, K. A. Gladniski, G. Gürdal, J. Tm. Goon, D. J. Hartley, A. A. Hecht, R. Krücken, N. Nikolov, J. R. Novak, G. Rainovski, L. L. Riedinger, I. Yigitoglu, N. V. Zamfir, and O. Zeidan  
 High-spin states in  $^{191,193}\text{Au}$  and  $^{192}\text{Pt}$ : Evidence for oblate deformation and triaxial shapes  
*Physical Review C* 76, 044315 (2007)
171. S.F. Ashley, P.H. Regan, K. Andgren, E.A. McCutchan, N.V. Zamfir, L. Amon, R.B. Cakirli, R.F. Casten, R.M. Clark, W. Gelletly, G. Gürdal, K.L. Keyes, D.A. Meyer, M.N. Erduran, A. Papenberg, N. Pietralla, C. Plettner, G. Rainovski, R.V. Ribas, N.J. Thomas, J. Vinson, D.D. Warner, V. Werner, E. Williams, H.L. Liu and F.R. Xu  
 Intrinsic state lifetimes in  $^{103}\text{Pd}$  and  $^{106,107}\text{Cd}$   
*Physical Review C* 76, 064302 (2007)
172. I. Cata-Danil, D. Filipescu, M. Ivascu, D. Bucurescu, N.V. Zamfir, T. Glodariu, L. Stroe, G. Cata-Danil, D.G. Ghita, C. Mihai, G. Suliman, T. Sava  
 Astrophysical S factor for  $\alpha$  capture on Sn117  
*Physical Review C* 78 (2008) 035803
173. D.G. Ghita, G. Cata-Danil, D. Bucurescu, I. Cata-Danil, M. Ivascu, C. Mihai, G. Suliman, L. Stroe, T. Sava, N.V. Zamfir  
 $^{124}\text{Te}$  and the E(5) critical point symmetry  
*International Journal of Modern Physics E* 17 (2008) 1453-1466
174. A. Roca, V.A. Nievaard, R.L. Moss, F. Stecher-Rasmussen, N.V. Zamfir  
 Validating a MCNPX model of Mg(Ar) and TE(TE) ionisation chambers exposed to 60CO gamma rays  
*Radiation Protection Dosimetry* 129 (2008), pp. 365-371
175. D. Bucurescu, N.V. Zamfir, G. Cata-Danil, M. Ivascu, N. Marginean  
 Universality of Mallmann correlations for nuclear band structures  
*Physical Review C* 78, (2008) 044322
176. A.I. Levon, G. Graw, Y. Eisermann, R. Hertenberger, J. Jolie, N.Yu. Shirikova, A. E. Stuchbery, A. V. Sushkov, P.G. Thiroff, H.-F. Wirth, and N.V. Zamfir  
 Spectroscopy of  $^{230}\text{Th}$  in the (p,t) reaction  
*Physical Review C* 79, 014318 (2009)
177. N.V. Zamfir, D. Bucurescu, G. Cata-Danil, M. Ivascu, N. Marginean  
 Correlations of energy ratios for collective nuclear bands  
*Acta Physica Polonica B* vol. 40 (2009), pp. 503-511
178. S. Pascu, Gh. Cata-Danil, D. Bucurescu, N. Marginean, N.V. Zamfir, G. Graw, A. Gollwitzer, D. Hofer, and B.D. Valnion  
 Investigation of the  $^{128}\text{Ba}$  nucleus with the (p, t) reaction  
*Physical Review C* 79, 064323 (2009)
179. N. Marginean, D. Bucurescu, C.A. Ur, C. Mihai, L. Corradi, E. Farnea, D. Filipescu, E. Fioretto, D. Ghita, B. Guiot, M. Gorska, M. Ionescu-Bujor, A. Iordachescu, D. Jelavic-Malenica, S.M. Lenzi, P. Mason, R. Marginean, D. Mengoni, G. Montagnoli, D. R. Napoli, S. Pascu, G. Pollarolo, F. Recchia, A. M. Stefanini, R. Silvestri, T. Sava, F. Scarlassara, S. Szilner, and N. V. Zamfir

Evolution of deformation in the neutron-rich krypton isotopes: The  $^{96}\text{Kr}$  nucleus  
Physical Review C80, 021301 (2009)

180. S. Pascu, Gh. Căta-Danil, D. Bucurescu, N. Mărginean, C. Müller, N. V. Zamfir, G. Graw, A. Gollwitzer, D. Hofer, and B. D. Valnion  
Structure investigation with the (p,t) reaction on  $^{132,134}\text{Ba}$  nuclei  
Physical Review C 81, 014304 (2010)
181. B. Rusu, D. Bucurescu, N. Marginean<sup>1</sup>, M. Ionescu-Bujor, A. Iordachescu, G. Cata-Danil, I. Cata-Danil, D. Deleanu, D. Filipescu, D. Ghita, T. Glodariu, M. Ivascu, C. Mihai, R. Marginean, S. Pascu, T. Sava, L. Stroe, G. Suliman, and N.V. Zamfir  
Isomerism of low-lying states in  $^{86}\text{Y}$   
Eur. Phys. J. A 44, 31–41 (2010)
182. C. Mihai, A. A. Pasternak, D. Filipescu, M. Ivașcu, D. Bucurescu, G. Căta-Danil, I. Cata-Danil, D. Deleanu, D. Ghiță, T. Glodariu, Yu. N. Lobach, N. Mărginean, R. Mărginean, A. Negret, S. Pascu, T. Sava, L. Stroe, G. Suliman, and N. V. Zamfir  
Side feeding patterns and nuclear lifetime determinations by the Doppler shift attenuation method in  $(\alpha,ny)$  reactions  
Phys. Rev. C 81, 034314 (2010)
183. S. Pascu, N. V. Zamfir, Gh. Căta-Danil, and N. Mărginean  
Structural evolution of the  $Z=52\text{--}62$  neutron-deficient nuclei in the interacting boson approximation framework  
Phys. Rev. C 81, 054321 (2010)
184. D.S. Delion, N.V. Zamfir  
Systematics of  $2_{+1}^+$  states in semimagic nuclei  
Phys. Rev. C 82, 031302(R) (2010)
185. N. Marginean, D.L. Balabanski, D. Bucurescu, S. Lalkovski, L. Atanasova, G. Cata-Danil, I. Cata-Danil, J.M. Daugas, D. Deleanu, P. Detistov, G. Deyanova, D. Filipescu, G. Georgiev, D. Ghita, K.A. Gladnishki, R. Lozeva, T. Glodariu, M. Ivașcu, S. Kisyov, C. Mihai, R. Marginean, A. Negret, S. Pascu, D. Radulov, T. Sava, L. Stroe, G. Suliman and N.V. Zamfir  
In-beam measurements of sub-nanosecond nuclear lifetimes with a mixed array of HPGe and LaBr<sub>3</sub>:Ce detectors  
Eur. Phys. J. A 46, 329–336 (2010)
186. M. Danchev, G. Rainovski, N. Pietralla, A., Gargano, A. Covello, C Baktash, JR Beene, CR Bingham, A. Galindo-Uribarri, K.A. Gladnishki, C.J. Gross, VY Ponomarev, DC Radford, L.L. Riedinger, M. Scheck, A.E. Stuchbery, J. Wambach, J., C.H. Yu, N.V. Zamfir  
One-phonon isovector  $2(1,\text{MS})(+)$  state in the neutron-rich nucleus  $(^{132}\text{Te})$   
Phys. Rev. C 84, 061306 (2011)
187. H.G. Borner, R. F. Casten, M. Jentschel, P. Mutti, W. Urban, N. V. Zamfir  
 $(^{102}\text{Ru})$ : A pivotal nucleus in the A similar to 100 region  
Phys. Rev. C 84, 044326 (2011)

188. S. Kisoyov, S. Lalkovski, N. Marginean, D.Bucurescu, L. Atanasova, D.L Balabanski, Gh. Cata-Danil, I. Cata-Danil, J-M Daugas, D. Deleanu, P. Detistov, D. Filipescu, G.Georgiev, D. Ghita, T. Glodariu, J. Jolie, D.S. Judson, R. Lozeva, R Marginean, C. Mihai, A. Negret, S. Pascu, D. Radulov, J-M Regis, M. Rudiger, T. Sava, L. Stroe, G. Suliman, N.V Zamfir, K.O Zell, M. Zhekova  
 In-beam fast-timing measurements in (103,105,107)Cd  
*Phys. Rev. C* 84, 014324 (2011)
189. D. Filipescu, V. Avrigeanu, T. Glodariu, C. Mihai, D. Bucurescu, M. Ivascu, I.Cata-Danil, L.Stroe, O. Sima, G. Cata-Danil, D. Deleanu, D. Ghita, N.Marginean, R. Marginean, A. Negret, S. Pascu, T. Sava, G. Suliman, N.V. Zamfir  
 Cross sections for alpha-particle induced reactions on (115,116)Sn around the Coulomb Barrier  
*Phys. Rev. C* 83, 064609 (2011)
190. C. Mihai, A.A Pasternak, S.Pascu, D. Filipescu, M. Ivascu, D. Bucurescu, G. Cata-Danil, I. Cata-Danil, D. Deleanu, D.G Ghita, T. Glodariu, N. Marginean, R. Marginean, A. Negret, T. Sava, L. Stroe, G. Suliman, N.V. Zamfir  
 Lifetime measurements by the Doppler-shift attenuation method in the (115)Sn(alpha,n gamma)(118)Te reaction  
*Phys. Rev. C* 83, 054310 (2011)
191. D. Bucurescu, E. Dragulescu, S. Pascu, Wirth H-F., D. Filipescu, G. Cata-Danil, I. Cata-Danil, D. Deleanu, K. Eppinger, T. Faestermann, D.G. Ghita, T. Glodariu, R. Hertenberger, M. Ivascu, R. Krucken, N. Marginean, R. Marginean, C. Mihai, A. Negret, T. Sava, L. Stroe, K. Wimmer, N.V. Zamfir  
 Excited states of the Pm-150 odd-odd nucleus  
*Phys. Rev. C* 85, 017304 (2012)
192. Mason P. J. R.; Alharbi T.; Regan P. H., et al.  
 Half-life of the I=4(-) intruder state in P-34: M2 transition strengths approaching the island of inversion *PHYSICAL REVIEW C* Volume: 85 Issue: 6 Article Number: 064303 ( 2012 )
193. Akkoyun S.; Algara A.; Alikhani B., et al.  
 AGATA-Advanced GAMMA Tracking Array  
 Nuclear Instruments&Methods in Physics Research A-Accelerators Spectrometers Detectors and Associated Equipment, 668.p. 26-58 (2012)
194. D. Bucurescu D., N. V.Zamfir  
 Systematics of hindrance factors in alpha decay of even-even trans-lead nuclei  
 Romanian Jurnal of Physics 57, p.69-81 (2012 )
195. Kueppersbusch C.; Pascu S.; von Brentano P., et al.  
 Low-spin excitations in Sm-146  
*European Physical Journal A*, 48 (2012)
196. S. Pascu, J. Endres, N.V. Zamfir, et. al.  
 Study of the pygmy dipole resonance in the interacting boson approximation framework  
 Source: *Physical Review C* 8, 064315 (2012)

## **B. List of articles in Journals of the Romanian Academy**

1. D. Bucurescu, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V. Zamfir  
Aspecte de structura nucleara in zona A~90  
Studii si Cercetari de Fizica 33 (1981) 747-754
2. D. Bucurescu, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V. Zamfir  
Descrierea izotopilor pari neutrano-deficitari ai Sr si Zr cu modelul bosonilor in interactie  
Studii si Cercetari de Fizica 35 (1983) 506-513
3. D. Bucurescu, G. Cata, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V. Zamfir,  
Lifetime Measurements for High-spin States in  $^{86}\text{Zr}$  and  $^{86}\text{Y}$   
Revue Roumaine de Physique 30 (1985) 13-22
4. D. Bucurescu, G. Cata, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V.Zamfir  
Aspecte de structura nucleara in zona  $\square\Box\Box$   
Studii si Cercetari de Fizica 37 (1985) 605-611
5. D. Bucurescu, G. Cata, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V.Zamfir  
Interacting Boson and Interacting Boson Fermion Calculations  
in the A~100 Transitional Region  
Revue Roumaine de Physique 30 (1985) 181-195
6. D. Bucurescu, G. Cata, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V.Zamfir  
Simetrii si supersimetrii in zona de nuclee A~100  
Studii si Cercetari de Fizica 38 (1986) 819-824
7. M. Ivascu, D.B.Ion, D.Bucurescu, G.Cata, D.Cutoiu, D.Galeriu, R.Ion-Mihai, N.V.Zamfir  
Search for Spontaneous Emission of Mesons from  $^{252}\text{Cf}$   
Revue Roumaine de Physique 32 (1987) 937-945
8. M.Ivascu, D.Bucurescu, G.Cata, D.Cutoiu, I.Ivascu, N.V.Zamfir  
Colectivitate si modele bosonice in nuclee cu A~80  
Studii si Cercetari de Fizica 41 (1988) 763-767
9. A.Abdel Haliem,D.Bucurescu,G.Cata,D.Cutoiu,V.Dorobantu, M.Ivascu, N.V.Zamfir  
Lifetimes of High-spin States in  $^{97}\text{Tc}$   
Revue Roumaine de Physique 34 (1989) 265-275
10. N.V. Zamfir, M. Ivascu, P. von Brentano  
E3 Transitions in Sm Isotopes in the IBA Model  
Revue Roumaine de Physique 35 (1990) 115-118
11. N.V. Zamfir and R.F. Casten  
Phase/shape transitions in nuclei  
Proceedings of the Romanian Academy A4 (2003) 107-114
12. Ivascu, M., Zamfir, N. V., Stroe, L., Suliman, G., Cata-Danil, I., Bucurescu, D., Cata-Danil, Gh., Mihai, C., Glodariu, T., Filipescu, D., Ghita, D., Sava, T.  
DSAM lifetime measurements in the odd-odd nucleus Cu-62

13. I. Cata-Danil, N.V. Zamfir, M. Ivascu, D. Bucurescu, Gh. Cata-Danil, T. Glodariu, G. Suliman, L. Stroe, D. Ghita, C. Mihai, T. Sava  
 $\alpha$  – induced cross sections of  $^{63}\text{Cu}$  for astrophysical p process  
Romanian Reports in Physics 59, 377-385 (2007)
14. Cata-Danil, I., Ivascu, M., Glodariu, T., Zamfir, N. V., Bucurescu, D., Filipescu, D., Cata-Danil, G., Stroe, L., Mihai, C., Ghita, D., Suliman, G., Sava, T.  
Measurement of cross sections and thick target yields for  $(\alpha, \gamma)$  process on Cu-63  
Romanian Reports in Physics 60, 555-561 (2008)
15. S. Anghel, Gh. Cata-Danil, N.V. Zamfir  
Structure Features Revealed from the Two Neutron Separation Energies  
Romanian Journal of Physics 54, 301-319 (2009)
16. M. Ivascu, I. Cata-Danil, D. Filipescu, L. Stroe, L., T. Glodariu, D. Bucurescu, Gh. Cata-Danil, D. Deleanu, D.G. Ghita, N. Marginean, R. Marginean, C. Mihai, S. Pascu, T. Sava, G. Suliman, N.V. Zamfir,  
Astrophysical S factor for proton capture on  $(147)\text{Sm}$  and  $(149)\text{Sm}$   
Romanian Journal of Physics 55, 1006-1012 (2010)
16. D. Bucurescu, G. Cata-Danil, M. Ivascu, N.V. Zamfir  
Correlations of low-energy excited states in even-even nuclei  
Romanian Journal of Physics 63, 1105-1119 (2011)
17. A. Olariu, C. Ivan, N.V. Zamfir  
Status of the new AMS facility in Magurele: the Center of Radiocarbon for Environment and Biosciences  
Romanian Reports in Physics 63, 923-928 (2011)
18. D. Bucurescu, G. Cata-Danil, M. Ivascu, N.V. Zamfir  
Correlations of low-energy excited states in even-even nuclei  
Romanian Reports in Physics 63, 1105-1119 (2011)
19. Sava, T., D. Bucurescu, G. Cata-Danil, I. Cata-Danil, D. Deleanu, D. Filipescu, D. Ghita, T. Glodariu, M. Ivascu, N. Marginean, R. Marginean, C. Mihai, V. Mosu, A. Negret, G. Pascovici, S. Pascu, L. Stroe, N.V. Zamfir  
In beam commissioning of a recoil mass spectrometer  
Romanian Journal of Physics 56, 1094-1107 (2011)

### **C. Chapters in monographies**

1. R.F. Casten and N.V. Zamfir  
Valence Correlation Schemes and the Structure of Heavy Actinide Nuclei  
Heavy Elements and Related New Phenomena,  
eds. W. Greiner and R.K. Gupta, World Scientific, Singapore, 1999, p. 263-276
2. N.V. Zamfir  
Octupole deformation in the actinides and the Interacting Boson Model Perspectives of Nuclear Structure and Nuclear Reactions  
dedicated to the 60th anniversary of the birthday of R. Jolos, JINR E4-2002-66
3. N.V. Zamfir, G.E. Fernandes, and R.F. Casten  
The phase/shape transition critical point and the Interacting Boson Model  
in "*The Intellectual Path of J.Q. Chen: a Memorial*"  
eds. Da Hsuan Feng, F. Iachello, J. Ping, and Fan Wang,  
World Scientific, Singapore, 2004) p.25-36

## **D. APS contributions**

1. N.V.Zamfir, P.von Brentano and A.Zilges  
E1 operator in the sdg-Interacting Boson Model  
*Physics of Hadrons and Nuclei*, Salzburg, Phys. Verlag 1(1992)51
2. A.Zilges,N.V.Zamfir,P.von Brentano,R.H.Heil,U.Kneissl,H.Pitz, C.Wesselborg  
E1 transitions from low-lying spin one states in the rare earth nuclei  
*Physics of Hadrons and Nuclei*, Salzburg, Phys. Verlag 1(1992)192
3. D.S.Brenner, R.F.Casten, W.-T.Chou, J.-Y.Zhang, K.Heyde, N.V.Zamfir  
Linearity of Nuclear Energies with the P-Factor  
*Annual Meeting of the American Physical Society*, Santa Fe, USA, 1992  
*Bulletin of the American Physical Society* 37 (1992)1321
4. N.V.Zamfir, R.F.Casten, W.T.Chou  
Signature splitting of octupole bands in vibrational nuclei  
*Annual Meeting of the American Physical Society*, Santa Fe, USA, 1992  
*Bulletin of the American Physical Society* 37 (1992)1289
5. D.S Brenner, N.V.Zamfir and R.F.Casten  
Universal anharmonic description of nuclei and critical phase transition  
*Annual Meeting of the American Physical Society*, Asilomar, USA,1993  
*Bulletin of the American Physical Society* 38 (1993) 1845
6. P.D.Cottle, J.L. Johnson, M.A. Kennedy, K.A. Stuckey, D.P. DiPre  
E.M.Baum,E.L.Johnson,N.V.Zamfir and R.F.Casten  
Octupole fragmentation in even-A Pt isotopes  
*Annual Meeting of the American Physical Society*, Asilomar, USA,1993  
*Bulletin of the American Physical Society* 38 (1993) 1832
7. N.V. Zamfir and R.F. Casten  
A simple shell model interpretation of the evolution of structure in 'pre-collective' nuclei  
*Annual Meeting of the American Physical Society*, 1993  
*Bulletin of the American Physical Society* 38 (1993) 1845
8. N.V.Zamfir and R.F.Casten  
Theoretical Investigation of Universal Anharmonic Vibrator Behavior in Nuclei  
*Annual Meeting of the American Physical Society*, 1994  
*Bulletin of the American Physical Society* 39 (1994) 1411}
9. D.S.Brenner, N.V.Zamfir, R.F.Casten  
The Phonon Structure of  $^{122}\text{Cd}$   
*Annual Meeting of the American Physical Society*, 1994  
*Bulletin of the American Physical Society* 39 (1994) 1401
10. C.J. Barton, R.L. Gill, R.F. Casten, D.S. Brenner, and N.V. Zamfir  
Coulomb Excitation of Radioactive Beams in Inverse Kinematics  
*American Physical Society Meeting*}, Bloomington, 1995

11. D.S. Brenner, R.F.Casten , R.L.Gill, N.V.Zamfir, C.J.Barton and B.D.Foy  
New vistas in nuclear structure- Coulomb excitation of Radioactive Nuclear Beams far from stability  
American Chemical Society Meeting }, Hawaii, 1995
12. N.V. Zamfir, R.F. Casten, P.D. Cottle, S.Deylitz, A. Gollwitzer, G. Graw, R. Hertenberger, B. Valnion, G.Cata-Danil, A. Oros, and W.T.Chou  
Octupole Fragmentation in  $^{134}\text{Ba}$   
American Physical Society Meeting, Cambridge, 1996
13. C.J. Barton, D.S. Brenner, B.D. Foy, R.L. Gill, R.F. Casten and N.V. Zamfir  
Measurements of Total Coulomb Excitation Cross Sections of Radioactive Beams in Inverse Kinematics  
American Physical Society Meeting, Cambridge, 1996
14. B.D. Foy, D.S. Brenner, C.J. Barton, R.L.Gill, N.V. Zamfir D.D. Warner, C.N. Davids, D. Blumenthal, D. Seweryniak, L.T. Brown  
Mass Measurements of  $^{151}\text{Er}$   
American Physical Society Meeting, Cambridge, 1996
15. R.F. Casten, N.V. Zamfir  
Empirical proton-neutron interactions and shell model interpretations  
*American Physical Society Meeting*, Washington DC, April 1997
16. C.Beausang, R. F. Casten, G. Cata-Dani; J.R. Cooper, R. Krucken  
N.V. Zamfir, C. Barton  
The YRAST Ball Array  
*American Physical Society Meeting*, Washington DC, 1998
17. J.R. Novak, C. Beausang, R.f. Casten, G. Cata-Dani; J.R. Cooper, R. Krucken, B. Liu, N.V. Zamfir, F. Hannachi, C. Barton  
Search for Superdeformation in Rn Isotopes  
American Physical Society Meeting, Washington DC, 1998
18. J.R. Cooper, R. Krucken, C. Beausang, R. F. Casten, C. Barton, G. Cata, B. Liu, J. Novak, N.V. Zamfir, A. Dewald, R. Peusquens, H. Tiesler, P. von Brentano  
New Yale Plunger Device  
American Physical Society Meeting, Washington DC, 1998
19. N.V. Zamfir, R.F. Casten, C.W. Beausang, R. Krucken, G. Cata-Danil, J.R. Cooper, B.Liu, J.R. Novak, M. Caprio  
Phase Coexistence in  $^{152}\text{Sm}$   
American Physical Society Meeting, Santa Fe, 1998
20. R. Krucken, L.Yang, C.W. Beausang, R.F. Casten, G. Cata-Danil, J.R. Cooper, B.Liu, J.R. Novak, N.V. Zamfir, C. Barton  
Nature of excited K=0+ bands in  $^{154}\text{Sm}$   
American Physical Society Meeting }, Santa Fe, 1998

21. J.R. Novak, C.W. Beausang, M. Caprio, R.F. Casten, G. Cata-Danil, J.R. Cooper, R.Krucken, B.Liu, T. Soccia, Z. Wang, N.V. Zamfir, and C.J. Barton  
High-spin Structure of Light Actinide Nuclei  
American Physical Society Meeting, Santa Fe, 1998
22. G. Cata-Danil, C. Beausang, R.F. Casten, J. R. Cooper, R. Krucken, B.Liu, J.R. Novak, N.V. Zamfir, and C. Barton  
The Yale He-jet carrier  
American Physical Society Meeting, Santa Fe, 1998
23. G. Cata-Danil, R.F. Casten, and N.V. Zamfir  
The (p,t) Cross Sections and the Structural Classification of Nuclei  
American Physical Society Meeting, Santa Fe, 1998
24. G. Cata-Danil, C. Beausang, r.F. casten, A. Chen, N. Chubrich, J.R. Cooper, R. Krucken, B. Liu, J.R. Novak, D. Visser, N.V. Zamfir  
The Yale Gas-filled Pole Magnetic Separator  
American Physical Society Meeting, Santa Fe, 1998
25. C.A. Aidala, R.Casten, N.V. Zamfir  
An Investigation of the production of Nuclei Far from Stability via Nuclear Fusion-Evaporation Reaction  
American Physical Society Meeting, Santa Fe, 1998
26. J.Y. Zhang, N. V. Zamfir, R.F. Casten  
Phase Coexistence in  $^{152}\text{Sm}$  in the GCM  
American Physical Society Meeting, Atlanta, 1999
27. M. Caprio, R.F. Casten, N.V. Zamfir, J.R. Cooper, J.R. Novak, C. Beausang, R. Krucken, Z. Wang, J. Cederkall, C. Barton, D.S. Brenner  
Study of  $0+2$  state in  $^{164}\text{Er}$  using the Yale Moving Tape Collector  
American Physical Society Meeting, Asilomar, 1999
28. J.R.Novak, C.Beausang, M. Caprio, R.F. Casten, J. Cederkall, J.R. Cooper, R. Krucken, Z. Wang, N. V. Zamfir, C. J. Barton, J. Saladin, I Birriel  
Investigation of  $^{205}\text{Rn}$  with ICEY Ball  
American Physical Society Meeting, Asilomar, 1999
29. B.Tomlin, D.S. Brenner, C. Barton, N.V. Zamfir, R. Gill, B.Liu, R. Krucken, C. Beausang, J.R. Novak, J.R. Cooper, J. Cederkall, Z. Wang, R.F. Casten  
Mass Measurements along the rp-process path  
American Physical Society Meeting, Asilomar, 1999
30. J.R. Cooper, R. Krucken, C. Beausang, R.F. Casten, J. Novak, N.V. Zamfir, C. Barton  
Lifetime measurements in  $^{128}\text{Ce}$   
American Physical Society Meeting}, Asilomar, 1999
31. Z. Wang, R. Krucken, C.Beausang, R.F. Casten, J. Cooper, J. Cederkall, M. Caprio, J.R. Novak, N. V. Zamfir, C. Barton  
Lifetime measurements in  $^{170}\text{Yb}$   
American Physical Society Meeting, Asilomar, 1999

32. C. Beausang, J.R. Novak, M. Caprio, R.F. Casten, J. Cederkall, J.R. Cooper, R. Krucken, Z. Wang, N.V. Zamfir, C. Barton  
Investigation of High Spin States in  $^{203}\text{Rn}$   
American Physical Society Meeting, Asilomar, 1999
33. A.A. Hecht, C.W. Beausang, M.A. Caprio, R.F. Casten, J.R. Cooper, R. Kruecken, J.R. Novak, Z. Wang, N.V. Zamfir, and K.E. Zyromski  
High-spin structure of  $^{136}\text{Pm}$ : evidence for chiral simmetry in nuclei?  
American Physical Society Meeting, Long Beach, California, April 2000
34. N. Pietralla, C.J. Barton, C.W. Beausang, M.A. Caprio, R.F. Casten, J.R. Cooper, A.A. Hecht, R. Kruecken, J.R. Novak, A. Wolf, N.V. Zamfir, and K.E. Zyromski  
Strong Isovector M1 Transitions in the Odd-odd N=Z Nucleus  $^{50}\text{Mn}$   
Division of Nuclear Physics Meeting of the APS, Williamsburg, Virginia, October 2000.
35. A. Wolf, N.V. Zamfir, Z. Berant, R.L Gill, D.S. Brenner, C.J. Barton, C.W. Beausang, M.A. Caprio, R.F. Casten, J.R. Cooper, A.A. Hecht, R. Kruecken, J.R. Novak, N. Pietralla, and K.E. Zyromski  
Study of the low-lying structure of  $^{128}\text{Ba}$  by gamma-gamma angular correlations  
Division of Nuclear Physics Meeting of the APS, Williamsburg, Virginia, October 2000.
36. C.J. Barton, C.W. Beausang, M.A. Caprio, R.F. Casten, J.R. Cooper, A.A. Hecht, R. Kruecken, J.R. Novak, N. Pietralla, N.V. Zamfir, K.E. Zyromski, and H. Boerner  
Level Lifetime Measurements in  $^{150}\text{Sm}$   
Division of Nuclear Physics Meeting of the APS, Williamsburg, Virginia, October 2000.
37. M.A. Caprio, R.F. Casten, N.V. Zamfir, C.W. Beausang, J.R. Cooper, A.A. Hecht, R. Kruecken, H. Newman, J.R. Novak, N. Pietralla, K.E. Zyromski, C.J. Barton, and A. Wolf  
Shape/phase coexistence in  $^{156}\text{Dy}$   
Division of Nuclear Physics Meeting of the APS, Williamsburg, Virginia, October 2000.
38. H. Newman, C.J. Barton, C.W. Beausang, M.A. Caprio, R.F. Casten, J.R. Cooper, A.A. Hecht, R. Kruecken, J.R. Novak, N. Pietralla, A. Wolf, N. V. Zamfir, K.E. Zyromski, J. Saladin, and I. Birriel  
High-spin states in  $^{203}\text{Rn}$   
Division of Nuclear Physics Meeting of the APS, Williamsburg, Virginia, October 2000.
39. R. Kruecken, C. Barton, C.W. Beausang, M.A. Caprio, R.F. Casten, J.R. Cooper, A.A. Hecht, J.R. Novak, N. Pietralla, N.V. Zamfir  
Kernstruktur - ergebnisse vom neuen SPEEDY spektrometer in Yale  
DPG Meeting, March 2001, Erlangen, Germany
40. A. Wolf, N.V. Zamfir, Z. Berant, R.L Gill, D.S. Brenner, N.V. Zamfir, C.J. Barton, C.W. Beausang, M.A. Caprio, R.F. Casten, J.R. Cooper, A.A. Hecht, R. Kruecken, J.R. Novak, N. Pietralla  
Study of low-lying levels in  $^{128}\text{Ba}$  by  $\gamma$ - $\gamma$  angular correlations and polarization measurements  
ACS Meeting, April 2001, San Diego, USA

41. C. Barton, D. Shapira, R. Casten, M. Caprio, J. Cooper, N.V. Zamfir, D. Brenner, T.A. Lewis, R.L. Gill  
 Recent results with GRAFYK and the neutron rich radioactive nuclear beams  $^{132,134}\text{Te}$  at the HRIBF  
 APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 38
42. M. Caprio, R. Casten, N.V. Zamfir, G.C. Ball, K.P. Jackson, P.A. Amaudruz, J.C. Thomas  
 Study of collective  $0_+$  excitations in  $^{162}\text{Er}$  at ISAC  
 APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 38
43. C. Beausang, J. Novak, C. Barton, M. Caprio, R. Casten, J. Cooper, A. Hecht, R. Kruecken, H. Newman, N. Pietralla, N.V. Zamfir, K. Zyromski, D.M.S. Johnson, H. Cheng, I. Birriel, J. Saladin, J.Y. Zhang  
 Gamma-rays and conversion electrons from  $^{205}\text{Rn}$   
 APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 39
44. J. Cooper, N. Pietralla, C. Barton, R. Kruecken, C. Beausang, M. Caprio, R. Casten, A. Hecht, H. Newman, J. Novak, N.V. Zamfir  
 Coulomb excitation of the  $2_{+ms}$  state of  $^{96}\text{Ru}$  in inverse kinematics  
 APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 39
45. N.V. Zamfir, M. Caprio, R. Casten, C. Barton, C. Beausang, J. Cooper, A. Hecht, R. Kruecken, J. Novak, N. Pietralla, D. Brenner, W.T. Chou, Z. Berant, A. Wolf  
 " $^{102}\text{Pd}$  - an E(5) nucleus?"  
 APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 39
46. R.F. Casten and N.V. Zamfir  
 Realization of the X(5) critical point symmetry in nuclei  
 APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 39
47. D. Meyer, C. Beausang, R. Kruecken, C. Barton, K. Zyromski, P. Parker, R. Casten, N.V. Zamfir, N. Pietralla, M. Caprio, J. Novak, J. Cooper, A. Hecht, G. Gurdal  
 Construction and testing of MACY: Multiwire Avalanche Counter at Yale  
 APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 81
48. G. Gurdal, C. Beausang, D. Balabanski, J. Novak, A. Hecht, M. Caprio, J. Cooper, R. Kruecken, R. Casten, N.V. Zamfir, Z. Berant, C. Barton, N. Pietralla, M.N. Erduran, B. Akkus, S. Erturk, I. Yigitoglu, Y. Oktem, D.J. Hartley, M. Gjongolov, J. Goon  
 Study of high spin states in  $^{192}\text{Au}$   
 APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 89
49. B. Albanna, R. Kruecken, J. Cooper, C. Barton, C. Beausang, R. Casten, M. Caprio, H. Cheng, A. Hecht, J. Novak, N.V. Zamfir, A. Dewald, T. Klug  
 Test of X(5) symmetry in  $^{150}\text{Nd}$ "  
 APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 96
50. D. Johnson, C. Beausang, J. Novak, C. Barton, I. Birriel, M. Caprio, R. Casten, J. Cooper, H. Cheng, A. Hecht, R. Kruecken, H. Newman, N. Pietralla, J. Saladin, J.Y. Zhang, K. Zyromski, N.V. Zamfir  
 High spin structure of  $^{205}\text{Rn}$

APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 101

51. A. Hecht, C. Beausang, B.F. Albanna, S. Bannon, C. Barton, M. Caprio, R. Casten, J. Cooper, D.M. Johnson, R. Kruecken, D. Meyer, H. Newman, J. Novak, N. Pietralla, M. Sciacchitano, K. Zyromski, G. Gurdal, N.V. Zamfir, Z. Berant, J.Y. Zhang  
Testing the limits of chiral structure in the mass 130 region  
APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 127
52. D. Brenner, C. Barton, N.V. Zamfir, R. Gill, C. Beausang, M. Caprio, R. Casten, J. Cooper, R. Kruecken, J. Novak, M. Shawcross, A. Teymurazyan, A. Aprahamian  
Mass measurement of Proton rich  $^{80}\text{Y}$   
APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 141
53. R. Kruecken, C. Barton, C. Beausang, R. casten, M. Caprio, H. Cheng, J. Cooper, A. Hecht, D. Meyer, J. Novak, M. Sciaciatano, K. Zyromski, N.V. Zamfir, V. Ninov, A. Ghiorso  
The gas-filled magnetic separator SASSYER  
APS-DNP Meeting, October 2001, Hawaii, USA, BAPS 46 (2001) 143
54. M.A. Caprio, N.V. Zamfir, R. Casten et al.,  
Lifetime measurements in transitional nuclei by fast electronic scintillation timing  
APS-DNP Meeting, October 2002, Michigan, USA, BAPS 47 (2002) 28
55. E. McCutchan, M. Caprio, N.V. Zamfir et al.,  
The  $0_{+2}$  state in  $^{162}\text{Yb}$  and the critical point phase/shape transition  
APS-DNP Meeting, October 2002, Michigan, USA, BAPS 47 (2002) 81
56. D. Meyer, C. Beusang, J. ressler, R. Casten, N.V. Zamfir et al.  
An Investigation of Light Radon Nuclei using SASSYER  
APS-DNP Meeting, October 2002, Michigan, USA, BAPS 47 (2002) 81
57. S. Langdown, P. Regan, A. Yamamoto, J. Ressler, C. Beausang, R. Kruecken, M. Caprio, R. Casten, G. Gurdal, A. Hecht, C. Hutter, D. Meyer, and N.V. Zamfir  
Transmission Determination and Commissioning Experiments for SASSYER  
APS-DNP Meeting, October 2002, Michigan, USA, BAPS 47 (2002) 101
58. G.E. Fernandes and N.V. Zamfir  
Evolution of Nuclear Structure in the phase/shape transition region  
APS-DNP Meeting, October 2002, Michigan, USA, BAPS 47 (2002) 54
59. A. Yamamoto, P. Regan, J. Ressler, C. Beausang, R. Kruecken, M. Caprio, R. Casten, G. Gurdal, A. Hecht, C. Hutter, D. Meyer, and N.V. Zamfir  
The rotational-vibrational interface in the gamma-soft  $^{101}\text{Ru}$   
APS-DNP Meeting, October 2002, Michigan, USA, BAPS 47 (2002) 54
60. D.E. Brenner, N.V. Zamfir et al.  
Mass measurements of  $^{80}\text{Y}$  by  $\beta$ - coincidence pectroscopy  
APS-DNP Meeting, October 2002, Michigan, USA, BAPS 47 (2002) 68
61. Mario Babilon, N.V. Zamfir, R.F. Casten, D. Kusnezov, L.F. dos Santos  
Octupole correlations in the N=88 region in the framework of the spdf-IBA'  
APS-DNP Meeting, Oct. 2003, Tucson, Arizona, USA, BAPS 48 (2003) 66

62. R.O. Hughes, N.V. Zamfir et al.  
Off-beam  $\gamma$ -spectroscopy of  $^{132}\text{Te}$  at the HRIBF  
APS-DNP Meeting, Oct. 2003, Tucson, Arizona, USA, BAPS 48 (2003) 69
63. E.A. McCuthan, N.V. Zamfir et al  
Coincidence RDDS lifetime measurements in  $^{162}\text{Yb}$   
APS-DNP Meeting, Oct. 2003, Tucson, Arizona, USA, BAPS 48 (2003) 78
64. A.M. Amro, C. Beausang, R. Casten, A. Hecht, A. Heinz, E. McCutchan, D. Meyer, J. Ressler, and N.V. Zamfir  
Surprising results beyond the Z=82 closed shell  
APS-DNP Meeting, Oct. 2003, Tucson, Arizona, USA, BAPS 48 (2003) 80
65. D.A. Meyer, C. Beausang, J. Ressler, H. Ai, H. Amro, M. Caprio, R. Casten, A. Hecht, E. McCutchan, and N.V. Zamfir  
Neutron degrees of freedom in the light Radon isotopes  
APS-DNP Meeting, Oct. 2003, Tucson, Arizona, USA, BAPS 48 (2003) 80
66. N.V. Zamfir, E.A. McCuthan, and R.F. Casten  
Critical Point Nuclei and the Interacting Boson Model  
APS-DNP Meeting, Oct. 2003, Tucson, Arizona, USA, BAPS 48 (2003) 95
67. C. Yerino, A. Heinz, H. Ai, R. Casten, C. Beausang, N.V. Zamfir, et al.  
Long-term study of the stability of Ge detector electronics for gain matching  
APS-DNP Meeting, Oct. 2003, Tucson, Arizona, USA, BAPS 48 (2003) 59
68. B. Crider, M. Fetea, R.F. Casten, C. Beausang, N.V. Zamfir et al.  
Fission fragment study of  $^{252}\text{Cf}$  using the Yale Moving Tape Collector  
APS-DNP Meeting, Oct. 2003, Tucson, Arizona, USA, BAPS 48 (2003) 59

## **E. Contribution to conferences**

1. D.Bucurescu, G.Constantinescu, M.Ivascu, N.V.Zamfir, M.Avrigeanu  
Lifetime measurements for high spin states in  $^{83,84,85}\text{Sr}$   
Proc.Int.Conf. on High Ang.Momentum, Strassbourg 1980, pp.31-32
2. D. Bucurescu, G. Constantinescu, M. Ivascu, N.V. Zamfir  
Investigation of high-spin states in A~80 nuclei in heavy ion reactions  
Critical Phenomena in Heavy Ion Collisions  
eds. A.A. Raduta, G. Stratan, 1980, pp.981-991
3. D. Bucurescu, G. Cata, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V. Zamfir  
Decay scheme of high-spin states in  $^{86}\text{Y}$   
In Beam Nuclear Spectroscopy  
eds Z.S. Dombrady, T. Fenyes,  
Acad. Kiado, Budapest, 1984, pp.129-134
4. D. Bucurescu, G. Cata, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V. Zamfir  
Ru and Pd isotopes in an extended IBA consistent-Q formalism  
Proc.Int.Conf. on Nucl.Phys.  
Harrogate, U.K.,1986, vol.1, p.391
5. D. Bucurescu, G. Cata, G. Constantinescu, D. Cutoiu, M. Ivascu, N.V. Zamfir  
Collective properties of the  $^{99}\text{Rh}$  nucleus  
Symmetries and Nuclear Structure, Dubrovnik, 1986  
eds. R.A. Meyer, V.Paar, Harvard Academic Publ., 1987, pp.143-149
6. N.V.Zamfir,D.Bucurescu,M.Ivascu,P.von Brentano,A.Dewald,O.Zell  
The decay properties of  $3^-$  state in  $^{142}\text{Nd}$  and  $^{144}\text{Sm}$   
Proc.Int Conf.on Nucl.Struc.through static and dynamic moments,  
Melbourne, Australia,1987, Conf.Proc.Press.,ed. H.H. Bolotin, p.46
7. D. Bucurescu, G.Cata, A. Gizon, J.Gizon, N.V. Zamfir  
Collective Structures in the light odd Ba isotopes  
Nuclear Structure in the nineties  
Oak Ridge, USA, 1990, pp.76-77
8. D.Bucurescu, G.Cata, N.V.Zamfir, A.Gizon, J.Gizon  
Description of odd A Ba isotopes in the IBFA Model  
Future Directions in Nuclear Physics with  $4\pi$  Gamma Detection Systems of a New  
Generation, Strassbourg,1991
9. A.Jungklaus, H.G.Borner, J.Jolie, R.F.Casten, N.V.Zamfir, P.von Brentano and K.P. Lieb  
New absolute transition rates in the  $^{148-152}\text{Sm}$  isotopes  
Int. Conf. on Nuclear Structure, Wiesbaden, Germany, 1992
10. N.V.Zamfir, R.F.Casten,J.Y.Zhang and D.S.Brenner  
New Signatures for Phase/Shape Transitional Regions  
Capture Gamma-ray Spectroscopy, Fribourg, Switzerland, 1993  
ed.J.Kern, World Scientific 1994, pp.479-481

11. J.Y.Zhang, R.F.Casten and N.V.Zamfir  
Statistical Distribution of Differences in Moment of Inertia for Normally Deformed Bands: Even-even Nuclei  
Conf.on Phys. from Large  $\gamma$ -ray Detector Arrays, Berkeley, 1994
12. W.Andrejtcheff, P.Petkov, N.V.Zamfir  
Evolution of the Triaxial Asymmetry at Variation of the Symmetric Quadrupole Deformation  
Perspective for the Interacting Boson Model, Padova, 1994  
eds. R.F.Casten et al., World Scientific 1994, pp.405-408
13. J.Y.Zhang, N.V.Zamfir and R.F.Casten  
Correlations of the P-factor with Rotational Motion in even-even Nuclei  
Int. Conf. on Nuclear Physics, Beijing, 1995
14. A.Wolf, Z.Berant, R.L.Gill, D.S.Brenner, N.V.Zamfir, S.Brant, and V.Paar  
g-factors of excited states in odd-even nuclei in the A=100 region  
Int. Conference on Nuclei Far From Stability, Arles, France, 1995  
Edition Frontieres, 1995, eds. M. Simon and O. Surlin, pp. 165-166
15. D.S.Brenner,N.V.Zamfir,R.L.Gill,R.F.Casten, and A.Wolf  
Phonon and Intruder Structures in Neutron Rich Cd Nuclei: Extension to  $^{122}\text{Cd}$   
Int. Conference on Nuclei Far From Stability, Arles, France, 1995  
Edition Frontieres, 1995, eds. M. Simon and O. Surlin, pp. 549-550
16. D.S.Brenner, R.F.Casten, R.L.Gill, N.V.Zamfir, C.J.Barton, and B.D.Foy  
Structure and collectivity very far from stability: Coulomb excitation of radioactive nuclear beams in inverse kinematics  
Conference on Nuclei Far From Stability, France, 1995  
Edition Frontieres, 1995, eds. M. Simon and O. Surlin, pp. 819-820
17. D.S. Brenner, B.D. Foy, R.L. Gill, C.N. Davids, D. Severyniak, D. Blumenthal, N.V. Zamfir, D.D. Warner, and C.J. Barton  
The neutron-proton interaction in medium mass nuclei - mass measurements at ATLAS  
9-th International Symposium on Capture  $\gamma$  - ray Spectroscopy and Related Topics  
Budapest, Hungary, October 8-12, 1996  
eds. G. Molnar et al, Springer, Hungary, 1997, p.252-253
18. H.Lehmann, H.G. Börner, R.F.Casten, C.Doll, P.E.Garett,  
M.Jentschel, J.Jolie, C.A. Mc.Grath, Minfang Yeh, S.W.Yates, and N.V. Zamfir  
Lifetime measurements of multiphonon states  
9-th International Symposium on Capture  $\gamma$  - ray Spectroscopy and Related Topics  
Budapest, Hungary, October 8-12, 1996,  
eds. G. Molnar et al, Springer, Hungary, 1997, p.203-210
19. J.Y. Zhang, R.F. Casten, and N.V. Zamfir  
Study of possible phase transitional behavior in the IBA and GCM  
Int. Conf. Nuclear Structure at the Extremes, Lewes, June 17-19, 1998  
J. Phys. G 25 (1999) 953-955

20. H. Lehmann, H.G. Börner, R.F. Casten, F. Corminboeuf, C. Doll, M. Jentschel, J. Jolie, N.V. Zamfir  
 On the importance of the SU(3) description for the interpretation of the first excited  $K^\pi=0^+$  band in deformed nuclei  
 Int. Conf. Nuclear Structure at the Extremes, Lewes, June 17-19, 1998  
*J .Phys. G* 25 (1999) 827-830
21. N.V.Zamfir, R.F.Casten, R.Krücken, C.W.Beausang, G.Cata-Danil, J.R.Cooper, Benyuan Liu, J.R.Novak, and C.J.Barton  
 New Signatures of phase transitional behavior in nuclei  
 ENAM '98, Michigan, 23-27 June, 1998  
 eds. B.M. Sherrill et al. AIP Conf. Proc. 455, NY, 1998, p. 614-617
22. D.S.Brenner, B.D. Foy, C.N.Davids, D.Seweryniak, D.Blumenthal, R.L.Gill, N.V.Zamfir, D.D.Warner, and C.J.Barton  
 Mass measurements of proton-rich medium mass nuclides  
 ENAM '98, Michigan, 23-27 June, 1998  
 eds. B.M. Sherrill et al. AIP Conf. Proc. 455, NY, 1998, p. 102-105
23. Benyuan Liu, N.V. Zamfir, D.S. Brenner, R.F. Casten, G.Cata, C.W. Beausang, R. Krücken, J.R.Cooper, J.R. Novak, C.J. Barton, and R.L. Gill  
 Study of the First Excited  $K^\pi=0^+$  Band in  $^{162}\text{Dy}$   
 ENAM '98, Michigan, 23-27 June, 1998  
 eds. B.M. Sherrill et al. AIP Conf. Proc. 455, NY, 1998, p. 556-559
24. C.J. Barton, D.S. Brenner, R.F. Casten, N.V. Zamfir, R.L. Gill, and D. Shapira  
 Total Coulomb Excitation Cross Section Measurements of Radioactive Nuclear Beams in Low Energy Inverse Kinematics  
 ENAM '98, Michigan, 23-27 June, 1998  
 eds. B.M. Sherrill et al. AIP Conf. Proc. 455, NY, 1998, p. 466-469
25. D. S. Brenner, B. D. Foy, C. J. Barton,C. N. Davids, D. Seweryniak, D. Blumenthal, R. L. Gill, N. V. Zamfir, and D. D. Warner  
 Mass measurements of proton-rich medium mass nuclides AIP Conf. Proc. 455, 102 (1998) |
26. C. J. Barton, D. S. Brenner, R. F. Casten, N. V. Zamfir, R. L. Gill, and D. Shapira  
 Total Coulomb excitation cross section measurements of radioactive nuclear beams in low energy inverse kinematics  
 AIP Conf. Proc. 455, 466 (1998)
27. L. Genilloud, J. Jolie, H.G. Borner, H. Lehmann, F. Becvar, N.V. Zamfir, and R.F.Casten  
 Study of octupole vibrations in  $^{168}\text{Er}$   
 Tenth Int. Symp. on Capture  $\gamma$ -ray Spectroscopy and Related Topics  
 Santa Fe, USA, August 30 - Sept. 3, 1999  
 AIP Conf. Proc. 529, New York 2000, Ed. S. Wender, p. 654-656
28. R. F. Casten, N. V. Zamfir  
 Phase transitions and phase coexistence in finite nuclei  
 AIP Conf. Proc. 481, 439 (1999)

29. D. S. Brenner, B. E. Tomlin, C. E. Barton, N. V. Zamfir, R. L. Gill, G. Cata-Danil, R. Krücken, C. W. Beausang, R. F. Casten, J. Cederkall, Benyuan Liu, M. A. Caprio, J. R. Novak, J. R. Cooper, Z. Wang  
 Mass measurements along the rp-process path  
 AIP Conf. Proc. 529, 315 (2000)
30. L. Genilloud, J. Jolie, H. G. Börner, H. Lehmann, F. Becvar, N. V. Zamfir, R. F. Casten  
 Study of octupole vibrations in  $^{168}\text{Er}$   
 AIP Conf. Proc. 529, 654 (2000)
31. M.A. Caprio, N.V. Zamfir, R.F. Casten, C.J. Barton, C.W. Beausang, J.R. Cooper, A.A. Hecht, R. Krücken, H. Newman, J.R. Novak, N. Pietralla, A. Wolf, and K.E. Zyromski  
 Shape/phase coexistence in  $^{156}\text{Dy}$   
 Romanian Summer School, Predeal, September 2000  
 Romanian Journal of Physics 46 (2001) 41-46
32. D.L. Balabanski, M. Danchev, D.J. Hartley, L.L. Riedinger, O. Zeidan, J.Y. Zhang, C. Barton, C. W. Beausang, M. Caprio, R.F. Casten, J.R. Cooper, A.A. Hecht, R. Krücken, J. Novak, N.V. Zamfir, K. Zyromski  
 Chiral Rotation in  $^{188}\text{Ir}$   
 International Symposium on Nuclear Structure Physics,  
 Göttingen, Germany, March 5-8, 2001,  
 World Scientific 2001, eds. R. Casten et. al., p. 325-326
33. N.V. Zamfir  
 $^{102}\text{Pd}$  - an E(5) nucleus?  
 Workshop Nuclear Structure in 21st century,  
 Yale University, June 2001
34. A. A. Hecht, C. W. Beausang, H. Amro, Z. Berant, C. J. Barton, M. A. Caprio, R. F. Casten, J. R. Cooper, G. Gürdal, R. Krücken, D. Meyer, H. Newman, J. R. Novak, N. Pietralla, J. Ressler, M. Sciacchitano, N. V. Zamfir, and Jing-ye Zhang  
 Experiments on Chiral Symmetry Breaking in the Mass 130 Region  
 AIP Conf. Proc. 638, 243 (2002)
35. Z. Berant, A. Wolf, N. V. Zamfir, M. A. Caprio, D. S. Brenner, N. Pietralla, R. L. Gill, R. F. Casten, C. W. Beausang, R. Kruecken, C. J. Barton, J. R. Cooper, A. A. Hecht, D. M. Johnson, J. R. Novak, H. Cheng, B. F. Albanna, G. Gurdal  
 g-Factor of the 2+1 State of  $^{164}\text{Yb}$   
 AIP Conf. Proc. 638, 233 (2002)
36. J. J. Ressler, R. Krücken, C. W. Beausang, J. M. D'Auria, H. Amro, R. F. Casten, M. A. Caprio, G. Gürdal, Z. Harris, C. Hutter, A. A. Hecht, D. Meyer, M. Sciacchitano, and N. V. Zamfir  
 SASSYER: A Gas-filled spectrometer at Yale  
 AIP Conf. Proc. 638, 125 (2002)
37. Z. Berant, A. Wolf, N. V. Zamfir, M. A. Caprio, D. S. Brenner, N. Pietralla, R. L. Gill, R. F. Casten, C. W. Beausang, R. Kruecken, C. J. Barton, J. R. Cooper, A. A. Hecht, D. M. Johnson, J. R. Novak, H. Cheng, B. F. Albanna, and G. Gurdal  
 g-Factor of the  $2^+_1$  State of  $^{164}\text{Yb}$   
 Int. Conf. on Nuclear Structure Mapping the Triangle,  
 Wyoming, USA, May 22-25, 2002  
 eds. A. Aprahamian et al., AIP 638 (2002) p. 233-234

38. A. A. Hecht, C. W. Beausang, H. Amro, Z. Berant, C. J. Barton, M. A. Caprio, R. F. Casten, J. R. Cooper, G. Gürdal, R. Krücken, D. Meyer, H. Newman, J. R. Novak, N. Pietralla, J. Ressler, M. Sciacchitano, N. V. Zamfir, and Jing-ye Zhang  
 Experiments on Chiral Symmetry Breaking in the Mass 130 Region  
 Int. Conf. on Nuclear Structure Mapping the Triangle,  
 Wyoming, USA, May 22-25, 2002 eds. A. Aprahamian et al., AIP 638 (2002) p. 243-244
39. D.C. Radford, C. Baktash, J.R. Beene, B. Fuentes, A. Galindo-Uribarri, C.J. Gross, P.A. Hausladen, T.A. Lewis, P.E. Mueller, E. Padilla, D. Shapira, D.W. Stracener, C.-H. Yu, C.J. Barton, M. Caprio, L. Coraggio, A. Covello, A. Gargano, D.J. Hartley, N.V. Zamfir  
 Nuclear structure studies with neutron-rich RIBS at the HRIBF, AIP Conf. Proc. 656, 401 (2003)
40. D.C. Radford, C. Baktash, J. Beene, B. Fuentes, A. Galindo-Uribarri, C.J. Gross, P.A. Hausladen, T.A. Lewis, P.E. Mueller, E. Padilla, D. Shapira, D.W. Stracener, C.-H. Yu, , C.J. Barton, M. Caprio, L. Coraggio, A. Covello, A. Gargano, D.J. Hartley, and N.V. Zamfir  
 Nuclear Structure Studies with Neutron-rich RIBS at the HRIBF  
 International Conference on Frontiers of Nuclear Structure,  
 Berkeley, USA 29 July-2 August 2002, AIP Conf. Proc. 656 (2003) p. 401-407.
41. P.H. Regan, A. Yamamoto, C. Beausang, C.Y. Wu, M. Caprio, R.F. Casten, G. Guerdal, A. Hecht, C. Hutter, R. Kruecken, S.D. Langdown, D. Meyer, J.J. Ressler, and N.V. Zamfir  
 The Highs and Lows of the mass 100 region  
 Conference on Frontiers of Nuclear Structure, Berkeley, California, July 29th – Aug. 2nd, 2002, AIP Conf. Proc. 656 (2003) p. 422.-428
42. D.S. Brenner, C.J. Barton, N.V. Zamfir, M.A. Caprio, A. Aprahamian, C.W. Beausang, Z. Berant, R.F. Casten, J.R. Cooper, R.L. Gill, R. Kruecken, J.R. Novak, N. Pietralla, M. Shawcross, A. Teymurazyan, A. Wolf, and M. Wiescher  
 Mass Measurement of  $^{80}\text{Y}$  by  $\beta$ - $\gamma$  coincidence spectroscopy  
 Proc. of the Eleventh Int. Symposium on Capture gamma-ray Spectroscopy and Related Topics, Prague, Czech Republic, September 2-6, 2002  
 eds. J. Kvasil et al., World Scientific, Singapore, 2003, p.343-349
43. R. Kruecken, C. Hutter, J.R. Cooper, C.J. Barton, M. Shawcross, A. Aprahamian, C.W. Beasang, M.A. Caprio, R.F. Casten, W.-T. Chou, M. A. Clark, D. Cline, M. Cromaz, A.A. Hecht, A.O. Machiavelli, N. Pietralla, M.A. Stoyer, C.Y. Wu , N.V. Zamfir, A. Zilges  
 Transition Matrix Elements in neutron-rich fission fragments  
 Eleventh International Symposium on Capture Gamma Ray Spectroscopy and Related Topics  
 Prague, Czech Republic, Sept. 2-6, 2002  
 eds. J. Kvasil et al., World Scientific, Singapore, 2003, p.128-134
44. D.C. Radford, C. Baktash, J. Beene, B. Fuentes, A. Galindo-Uribarri, C.J. Gross, P.A. Hausladen, T.A. Lewis, P.E. Mueller, E. Padilla, D. Shapira, D.W. Stracener, C.-H. Yu, , C.J. Barton, M. Caprio, L. Coraggio, A. Covello, A. Gargano, D.J. Hartley, and N.V. Zamfir  
 Nuclear Structure Studies with heavy neutron-rich RIBS at the HRIBF  
 Int. Conference on Collective Motion, Aizu-Wakamatsu, Fukushima, Japan, Nov. 6-9, 2002.

Frontiers of Collective Motions, eds. H. Iwasaki and H. Sagawwa (World Scientific, Singapore, 2003, p.213.

45. P. H. Regan, A. D. Yamamoto, C. W. Beausang, N. V. Zamfir, R. F. Casten, Jing-ye Zhang, M. A. Caprio, G. Gürdal, A. A. Hecht, C. Hutter, R. Krücken, S. D. Langdown, D. Meyer, J. J. Ressler  
The highs and lows of the A=100 Region: Vibration-to-rotation evolution in Mo and Ru isotopes  
AIP Conf. Proc. 656, 422 (2003)
46. N.I. Nikolov, D.L. Balabanski, B. Akkus, C.W. Beausang, M. Boston, R.F. Casten, M. Danchev, P. Denitsov, M. Djongolov, M.N. Erduran, S. Erturk, K.A. Gladnishki, G. Gurdal, T.M. Goon, D.J. Hartley, A.A. Hecht, J.R. Novak, Y. Oktem, G. Rainovski, L.L. Riedinger, G. Rusev, N.V. Zamfir, O. Zeidan, I. Yigitoglu  
High spin states and shape changes in the transitional 185-190Ir nuclei  
XV International School on Nuclear Physics, Neutron Physics and Nuclear Energy  
Sept. 9- 13, 2003, Varna, Bulgaria, (in press)
47. E. A. McCutchan, N. V. Zamfir, and R. F. Casten  
Exciting effects of excited 0+ energies  
AIP Conf. Proc. 726, 235 (2004)
48. A. Dewald, O. Mueller, D. Tonev, A. Fitzler, B. Saha, K. Jessen, S. Heinze, A. Linnemann, J. Jolie, K.O. Zell, P. von Brentano, P. Petkov, R.F. Casten, M. Caprio, J.R. Cooper, R. Kruecken, N.V. Zamfir, D. Bazzacco, S. Lunardi, C. Rossi Alvarez, F. Brandolini, C. Ur, G. de Angelis, D.R. Napoli, E. Farnea, N. Marginean, T. Martinez, and M. Axiotis  
Shape changes and test of the critical point symmetry X(5) in N=90 nuclei  
Int. Conf. on Nuclear Structure with Large gamma-arrays: Status and Perspectives, Legnaro-Padova, Italy, Sept. 23-27, 2002, Eur. Phys. J. A20, 173 – 178 (2004).
49. G. Graw, Y. Eisermann, R. Hertenberger, H.-F. Wirth, S. Christen, O Moeller, D. Tonev, J. Jolie, G. Guenther, A.I. Levon, and N.V. Zamfir  
Octupole two phonon states in deformed nuclei  
Symmetries in Nuclear Structure Erice, Italy, March 23-30, 2003,  
Eds. A. Vitturi and R.F. Casten World Scientific, 2004..
50. D.C. Radford, C. Baktash, J.R. Beene, B. Fuentes, A. Galindo-Uribarri, J. Gomez del Campo, C.J. Gross, M.L. Halbert, Y. Larochelle, T.A. Lewis, J.F. Liang, J. Mas, P.E. Mueller, E. Padilla, D. Shapira, D. Stracener, R. Verner, C.H. Yu, C.J. Barton, M.A. Caprio, D.J. Hartley, N.V. Zamfir  
Nuclear Structure Studies with Heavy Neutron-Rich RIBS at the HRIBF  
The 6<sup>th</sup> Int. Conf. On Radioactive Nuclear Beams (RNB6), Argonne, Illinois 22-26 Sept. 2003, Nuclear Physics A746 (2004) 83c-89c
51. E. A. McCutchan, N.V. Zamfir , and R.F. Casten  
Exciting effects of excited 0+ energies  
Proc. Int Conf. on Honor of Stuart Pittel on the occasion of his 60<sup>th</sup> birthday, Cocoyoc, Moreles, Mexico, April 19-22, 2004  
Nuclear Physics, Large and Small: Microscopic Studies of Collective Phenomena''  
Eds. R. Bijker et al. (AIP Conf. Proc. 726, NY, 2004), p. 235

52. O. Moeller, A. Dewald, A. Tizler, K. Jessen, D. Tonev, J. Jolie, K.O. Zell, P. von Brentano, R.F. Casten, N.V. Zamfir, P. Petkov, F. Harrissopoulos, D.R. Napoli, N. Marginean, M. Aiotis, C. Rusu, D. Bazzaco, S. Lunardi, C.A. Ur, R. Menegazzo, and E. Farnea  
 Test of the Critical Point Symmetry X(5) in the A=150,180 Regions  
 Internatioal Nuclear Physics Conference INPC 2004, Goteborg, Sweden, June 27 –July 2, 2004
53. J.J. Ressler, R.F. Casten, C.W. Beausang, and N.V. Zamfir  
 A New Signature for Spherical Nuclei: Seniority Conserving Transitions  
 Conference on Nuclei at the Limits, Argonne Nat Lab., Argonne, Illinois, July 26-30, 2004
54. D.A. Meyer, C.W. Beausang, J.J. Ressler, H. Ai, H. Amro, M. Babilon, R.F. Casten, G. Gurdal, A. Heinz, E.A. McCutchan, C. Plettner, J. Qian, N. Thomas, and N.V. Zamfir  
 Investigation of 208,209Fr  
 Conference on Nuclei at the Limits, Argonne Nat. Lab., Argonne, Illinois, July 26-30, 2004
55. L.A. Bernstein, J.T. Burke, J.A. Church, L. Ahle, J.R. Cooper, R.D. Hoffman, J. Punyon, A.Schiller, E. Algin, C. Plettner, H. Ai, C.W. Beausang, R.F. Casten, R. Hughes, E. Ricard-McCutchan, D. Meyer, J.J. Ressler, J.A. Caggiano, N.V. Zamfir, H. Amro  
 Surrogate Nuclear Reactions using STARS  
 INTERNATIONAL CONFERENCE ON NUCLEAR DATA FOR SCIENCE AND TECHNOLOGY , AIP Conf. Proc. 769, pp. 890-893 (2004), Santa Fe, New Mexico (USA)
56. N.V. Zamfir, R.O Hughes, R.F. Casten, D.C. Radford, C.J. Barton, C. Baktash, M.A. Caprio, A. Galindo-Uribarri, C.J. Gross, P.A. Hausladen, E.A. McCutchan, J.J. Ressler, D. Shapira, D.W. Stracener, C.H. Yu  
 132Te and single-particle density dependent pairing  
 ENAM04, 4th International Conference on Exotic Nuclei and Atomic Masses  
 September 12-16, 2004, Pine Mountain, Georgia, USA  
 Eur.Phys. J A25, 389-390 (2005)
57. E.A. McCutchan, N.V. Zamfir, and R.F. Casten  
 Ground State Properties and Phase/shape transitions in the IBA''  
 ENAM04, 4th International Conference on Exotic Nuclei and Atomic Masses  
 September 12-16, 2004, Pine Mountain, Georgia, USA  
 Eur.Phys. J A25, 435-436 (2005)
58. D.C. Radford, C. Baktash, C.J. Barton, J. Batchelder, J.R. Beene, C.R. Bingham, M.A. Caprio, M. Danchev, B. Fuentes, A. Galindo-Uribarri, J. Gomez del Campo, C.J. Gross, M.L. Halbert, D.J. Hartley, P. Hausladen, J.K. Hwang, W. Krolas, Y. Laroche, J.F. Liang, P.E. Mueller, E. Padilla, J. Pavan, A.Piechaczek, D. Shapira, D.W. Stracener, R.L. Varner, A. Woehr, C.H. Yu, and N.V. Zamfir  
 Coulomb excitation and transfer reactions with neutron-rich radioactive beams  
 ENAM04, 4th International Conference on Exotic Nuclei and Atomic Masses  
 September 12-16, 2004, Pine Mountain, Georgia, USA  
 Eur.Phys. J A25, 383-387 (2005)
59. N.J. Stone, A.E. Stuchbary, M. Danchev, J. Pavan, C.L. Timlin, C. Baktash, C. Barton, J.R. Beene, N. Benczer-Koller, C.R. Bingham, J. Dupak, A. Galindo-Uribarri, C.J. Gross, G. Kumbartski, D.C. Radford, J.R. Stone, and N.V. Zamfir

First nuclear moment measurements with radioactive beams by recoil-in-vacuum method:  
g-factor of the  $2+_1$  state in  $^{132}\text{Te}$   
ENAM04, 4th International Conference on Exotic Nuclei and Atomic Masses  
September 12-16, 2004, Pine Mountain, Georgia, USA  
Eur.Phys. J A25, 205-208 (2005)

60. Bernstein, L.A., Burke, J.T., Church, J.A., Ahle, L., Cooper, J.R., Hoffman, R.D., Punyon, J., Schiller, A., Algin, E., Plettner, C., Ai, H., Beausang, C.W., Casten, R.F., Hughes, R., Ricard-Mccutchan, E., Meyer, D., Ressler, J.J., Caggiano, J.A., Zamfir, N.V., Amro, H., Heinz, A., Fallon, P., McMahan, M.A., MacChiavelli, A.O. Phair, L.W.  
Surrogate nuclear reactions using STARS  
AIP 769 (2005) 890-893
61. J.J. Ressler, C.W. Beausang, R.F. Casten, N.V. Zamfir, H. Ai, H. Amro, M. Babilon, R.B. Cakirli, J.A. Caggiano, G. Gürdal, A. Heinz, R.O. Hughes, S.D. Langdown, E.A. McCutchan, D.A. Meyer, C. Plettner, J. Qian, P.H. Regan, M.J.S. Sciacchitano, N.J. Thomas, E. Williams and A. Yamamoto  
Isomers and the role of seniority in the trans-Pb nuclei  
Int. Conf. On the interface between Nuclear Structure, Astrophysics and Reactions (NUSTAR '05), Surrey, Guildford, UK, January 5-8, 2005.  
J. Phys. G 31, S1605-S1610 (2005)
62. K. Andgren, P.H. Regan, L. Amon, S. Ashley, R.B. Cakirli, R.F. Casten, R.M. Clark, G. Gürdal, K. Keyes, L. McCutchan, D.A. Meyer, M. Nizamettii Erduran, A. Papenberg, N. Pietralla, R.V. Ribas, N.J. Thomas, J. Vinson, D.D. Warner, E. Williams and N.V. Zamfir  
Lifetime measurements of medium spin states in  $^{107}\text{Cd}$   
International Conference on the Interface between Nuclear Structure, Astrophysics and Reactions (Nustar '05), Surrey, Guildford, UK, January 5-8, 2005.  
Journal of Physics G. 31, S1563-S1568 (2005)
63. K. Andgren, S. Ashley, P.H. Regan, E.A. McCutchan, N.V. Zamfir, L. Amon, R.B. Cakirli, R.F. Casten, R.M. Clark, M.N. Erduran, G. Gürdal, K. Keyes, , D.A. Meyer, A. Papenberg, N. Pietralla, G. Rainovski, R.V. Ribas, N.J. Thomas, J. Vinson, D.D. Warner, V. Werner, E. Williams  
Recoil distance method lifetime measurements in  $^{107}\text{Cd}$  and  $^{103}\text{Pd}$   
AIP 831 (2006) 391-393
64. D.L. Balabanski, K.A. Gladnishki, G. Lo Bianco, A. Saltarelli, N.V. Zamfir, E. McCutchan, H. Ai, R.F. Casten, A. Heinz, D.A. Meyer, C. Plettner, J. Qian, V. Werner, E. Williams, B. Akkus, L. Amon, L., R.B. Cakirli, M.N. Erduran, Y. Oktem, S.F. Ashley, P.H. Regan, G. Rainovski  
Evidence for X(5) critical point symmetry in Ce-128  
Int. Conf on Frontiers of Nucl. Strcuture, Shanghai, China, June 2006  
Int. Journal of Modern Phys. E15 (2006) 1735-1740
65. A. Roca, S. Nievaart, G.G. Daquino, R.L. Moss, N.V. Zamfir, R. Schmidt, F. Stecher-Rasmussen, Y.-H. Liu, J. Rassow, W. Sauerwein:  
The use of Ionisation Chambers in a Mixed Neutron-Photon Beam  
Protons, Ions and Neutrons in Radiation Oncology International Symposium  
6-7 July 2007, Technische Universität München
66. S.F. Ashley, A. Linnemann, J. Jolie, P.H. Regan, K. Andgren, A. Dewald, E.A. McCutchan, B. Melon, O. Moeller, N.V. Zamfir, L. Amon, N. Boelaert, R.B. Cakirli, R.F. Casten, R.M. Clark, C. Fransen, W. Gelletly, G. Gurdal, M. Heidemann, K.L. Keyes, M.N. Erduran, D.A. Meyer, A. Papenberg, C. Plettner, G. Rainovski, R.V. Ribas, N.J. Thomas, J. Vinson,

D.D.Warner, V.Werner, E.Williams, K.O.Zell,  
Lifetime determination of excited states in Cd-106  
ACTA PHYSICA POLONICA B 38 (4): 1385-1388 APR 2007

67. D. Bucurescu, N.V. Zamfir, G. Cata-Danil, M. Ivascu, N. Marginean  
Universality of Mallmann correlations for nuclear band structures  
AIP Conf. Proc. 1072, 27 (2008)
68. N. V. Zamfir, D. Bucurescu, G. Căta-Danil, M. Ivașcu, and N. Mărginean  
Correlations of Energy Ratios for Collective Nuclear Bands  
CAPTURE GAMMA-RAY SPECTROSCOPY AND RELATED TOPICS: Proceedings  
of the 13th International Symposium on Capture Gamma-Ray Spectroscopy and Related  
Topics  
AIP Conf. Proc. 1090, pp. 328-332 (2008), Cologne (Germany)
69. K. Hauschild, A. Lopez-Martens, Ch. Briançon, P. Désesquelles, S.  
Garcia-Santamaria, A. Korichi, J. Robin, O. Dorvaux, J. Piot,  
D. Curien, B. Gall, F. Khalfallah, A. Khouaja, M. Rousseau, L.  
Stuttgé, N. Rowley, A.V. Yeremin, A.V. Belozerov, M.L. Chelnokov,  
V.I. Chepigin, V.A. Gorshkov, A.V. Isaev, I.N. Izosimov,  
A.P. Kabachenko, D.E. Katrakov, A.N. Kutznetsov, O.N. Malyshev,  
A.G. Popeko, R.N. Sagaidak, A.V. Shutov, E.A. Sokol, A.I. Svirikhin,  
T. Wiborg-Hagen, M. Guttormsen, A.C. Larsen, H.T Nyhus, S. Siem,  
N.U.H. Syed, F. Hanappe, V. Bouchat, P. Jones, R. Borcea,  
G. Drafta, D. Pantelica, F. Rotaru, N. Scintee, N.V. Zamfir,  
A. Görgen, Ch. Theisen, A. Minkova, T. Kutsarova,  
Ch. Stodel, S. Mullins, E. Lieder, S. Antalic, Š. Šáro  
M. Venhart. et al.  
Spectroscopy of transfermium nuclei using the GABRIELA set up at the focal plane of  
the VASSILISSA recoil separator  
INTERNATIONAL SYMPOSIUM ON EXOTIC NUCLEI, Sochi (Russia) 2009,  
IP Conf. Proc. 1224, 269 (2010)
69. J. Beller, J. Wagner, M. Ahmed, D. Deleanu, D.M. Filipescu, T. Glodariu, J. Isaak1, J.  
H. Kelley, E. Kwan, N. Pietralla, R. Raut, C. Romig, G. Rusev, M. Scheck, S.C. Stave,  
A. Tonchev, W. Tornow, H.R. Weller, N.-V. Zamfir and M. Zweidinger  
Energy separation of the 1+/1- parity doublet in 20Ne  
Journal of Physics: Conference Series 366 (2012) 012003  
XIX International School on Nuclear Physics, Neutron Physics and Applications, Varna,  
Bulgaria (2011)
70. M Danchev, G Rainovski, N Pietralla, A Gargano, A Covello, C. Baktash, J R Beene, C R  
Bingham, A Galindo-Uribarri, K A Gladnishki, C J Gross, V Yu Ponomarev, D C Radford, L L  
Riedinger, M Scheck, A E Stuchbery, J Wambach, C -H Yu and N V Zamfir  
One-phonon isovector 2+1,MS state in the neutron rich nucleus 132Te  
Journal of Physics: Conference Series 366 (2012) 012008,  
XIX International School on Nuclear Physics, Neutron Physics and Applications, Varna,  
Bulgaria (2011)
71. S Kisiov, S Lalkovski, N Marginean, D Bucurescu, L Atanasova, D Balabanski, Gh Cata-Danil, I  
Cata-Danil, D Deleanu, P Detistov, D Filipescu, D Ghita, T Glodariu, R Marginean, C Mihai, A  
Negret, S Pascu, T Sava, L Stroe, G Suliman, N.V. Zamfir, M. Zhekova  
Fast-timing measurements in 95, 96Mo  
Journal of Physics: Conference Series 366 (2012) 012027,  
XIX International School on Nuclear Physics, Neutron Physics and Applications, Varna,

Bulgaria (2011)

72. Ovidiu Teşileanu, Daniel Ursescu, and Nicolae Victor Zamfir  
Extreme Light Infrastructure – Nuclear Physics  
International Conference on Nucleus-Nucleus Collision,  
San Antonio, Texas, May 2 - June 2, 2012
73. D. Bucurescu, N.V. Zamfir  
Fine structure of alpha decay of even-even trans-lead nuclei – an intriguing nuclear  
structure paradigm  
Conference: "Nuclear Structure and Dynamics", Opatija, Croatia, July 9 - 13, 2012
74. S. Pascu, M. Spieker, D. Bucurescu, T. Faestermann, R. Hertenberger, S. Skalacki, S.  
Weber, H. F. Wirth, N. V. Zamfir, A. Zilges  
Possible experimental evidence for the presence  
of double octupole states in  $^{240}\text{Pu}$   
Conference: "Nuclear Structure and Dynamics", Opatija, Croatia, July 9 - 13, 2012
75. P. J. R. Mason, Zs. Podolyàk, N. Marginean, P. H. Regan, T. Alexander, A. Algora, T.  
Alharbi, M. Bowry, R. Britton, D. Bucurescu, A. M. Bruce, M. Bunce, G. Cata-Danil, I.  
Cata-Danil, N. Cooper, D. Deleanu, D. Delion, D. Filipescu, W. Gelletly, T. Glodariu, D.  
Ghita, G. Ilie, D. Ivanovak, S. Kisayok, S. Lalkovskik, S. N. Liddick, R. Marginean, C.  
Mihai, K. Mulholland, A. Negret, S. Pascu, S. Rice, O. J. Roberts, T. Sava, J. F. Smith,  
P. -A. Söderström, P. D. Stevenson, L. Stroe, G. Suliman, C. Townsley, V. Werner, E.  
Wilson, R. T. Wood, N. V. Zamfir and M. Zheкова  
 $^7\text{Li}$ -Induced Reactions for Fast-Timing With  
LaBr<sub>3</sub>: Ce Detectors  
Conference: "Nuclear Structure and Dynamics", Opatija, Croatia, July 9 - 13, 2012
76. J. Beller, J. Wagner, M. Ahmed, D. Deleanu, D.M. Filipescu, T. Glodariu, J. Isaak, J. H.  
Kelley, E. Kwan, N. Pietralla, R. Raut, C. Romig, G. Rusev, M. Scheck, S.C. Stave, A.  
Tonchev, W.Tornow, H.R. Weller, N.-V. Zamfir, M. Zweidinger  
Energy separation of the 1+/1- parity doublet in 20Ne  
XIX International School on Nuclear Physics, Neutron Physics and Applications ,IOP  
Publishing, Journal of Physics, 366 (2012)
77. A. I. Levon, G. Graw, G. Christen, Y. Eisermann, C. Günther, R. Hertenberger,  
J. Jolie, O. Möller, P. Thirolf, D. Tonev, H.-F. Wirth, N. V. Zamfir  
**0+** states and collective bands in deformed actinide nuclei  
Iadernaya Fizika ta Energetika (Kiev) n3. 4 (2007) 27- 39

## **F. Invited lectures**

1. P.von Brentano, A.Zilges, R.Herzberg, N.V.Zamfir, U.Keissl, R.D.Heil, H.Pitz  
C.Wesselborg  
Low-lying electric dipole excitations in nuclei of the rare-earth region  
in The building blocks of nuclear structure, Amalfi, Italy, 1992  
ed. A.Covello, World Scientific, 1992, pp.457-476
2. P. von Brentano, A.Zilges, N.V.Zamfir and R.D.Herzberg  
Low-Lying Electric Dipole Excitations and the Interacting Boson Model  
in Symmetries in Science VI,  
ed. B.Gruber and T. Otsuka, Plenum Press, pp.123-130, 1992
3. D.S.Brenner, R.F.Casten,J.Y.Zhang,N.V.Zamfir and K.Heyde  
Is Nuclear Structure really so simple? (The P-Factor revisited)  
6th International Conference on Nuclei Far From Stability/9th International Conference on  
Atomic Masses and Fundamental Constants, Bernkastel Kues, Germany (1992)  
NUCLEI FAR FROM STABILITY/ATOMIC MASSES AND FUNDAMENTAL  
CONSTANTS, Inst. of Phys. Conf. Ser. No. 132, 1992, pp. 615-617 (1993)
4. R.F. Casten and N.V.Zamfir  
Phenomenological Correlations in Nuclear Structure: An Opportunity for Nuclear  
Astrophysics and a Challenge to Theory  
in Nuclear Physics in the Universe, Oak Ridge, USA, 1992  
eds M.W.Guidry and M.R.Strayer, IOP Publishing, 1993, pp.413-431
5. N.V. Zamfir  
Low-Lying Spectra of Gamma-soft Nuclei  
in High Spins and Novel Deformations,  
ECT, Trento, Italy, 1993
6. R.F. Casten, N.V. Zamfir and D.S. Brenner  
A New Simple Global Phenomenology of Nuclear Shape Transitions  
in Third Int. Conf. on Radioactive Beams, Michigan, USA, 1993  
ed. D.J.Morrisey, Edition Frontieres, 1993, pp.229-233
7. N.V. Zamfir, R.F. Casten, D.S. Brenner  
Global Phenomenology of Mean Field Structure and Phase Transitional Behavior in Nuclei  
in Nuclear Physics Symposium, Oaxtepec, Mexico,1994  
Revista Mexicana de Fisica 40 (1994) 1-11
8. R.F. Casten, N.V.Zamfir and D.S.Brenner  
Correlations in Nuclear Observables: Towards a Synthesis of Structural Evolution  
in Capture Gamma-ray Spectroscopy, Fribourg, Switzerland, 1993  
ed. J. Kern, World Scientific, pp. 29-42, 1994
9. N.V. Zamfir  
E1 and E3 Transition Rates in the sdf-IBA  
in Perspectives for the Interacting Boson Model, Padova, 1994  
eds R.F.Casten et al., World Scientific, 1994, pp.327-334

10. R.F.Casten, N.V.Zamfir, and D.S.Brenner  
 Universal Correlations of Collective Observables: Empirical Phenomenology and Model Interpretations in International Symposium held in honor of Akito Arima "Frontiers of Nuclear Structure Physics", Tokyo, Japan, 1994  
 World Scientific, 1996, eds M.Ishihara et al., pp.57-68
11. R.F.Casten and N.V.Zamfir  
 Correlations of Collective Observables and the Phonon Structure of Nuclei" in Perspectives of Nuclear Physics in the Late Nineties, Hanoi, Vietnam,  
 World Scientific, 1995, eds. N.D.Dang et al, pp. 1-11
12. R.F.Casten, R.L. Gill, N.V. Zamfir, C.Barton,D.S. Brenner and B. Foy  
 Coulomb Excitation of the Lowest States of Deformed Nuclei with Radioactive Nuclear Beams in Inverse Kinematics,  
 Workshop on Secondary Beams at ATLAS, Argonne, 1995
13. R.F. Casten and N.V. Zamfir  
 Correlations of Nuclear Observables. New Siganatures of Structure of Unknown Nuclei  
 Workshop on Radioactive Beams, GANIL, France, 1995
14. R.F. Casten and N.V. Zamfir  
 Experimental and Phenomenological Approaches to the Structure of Exotic Neutron-rich Nuclei  
 in New Perspectives in Nuclear Structure,Ravello,Italy,1995  
 World Scientific, 1996, ed. A.Covello, pp.17-28
15. R.F. Casten and N.V. Zamfir  
 Anharmonic Vibrator Description of Collective Nuclei  
 in Frontiers in Nuclear Physics,  
 dedicated to the 70th anniversary of the birthday of V.G. Soloviev, Dubna, 1995, pp. 51-60
16. R.F. Casten and N.V. Zamfir  
 Universal Correlations of Nuclear Observables and New Signatures of Structure in Exotic Nuclei: A Review in International Nuclear Physics Conference, Beijing 1995  
 World Scientific, 1996, eds. Sun Zuxun and Xu Jincheng, pp. 467-480
17. R.F.Casten and N.V.Zamfir  
 Studies of Nuclear Structure of Exotic Nuclei with Radioactive Beams  
 American Chemical Society Meeting, Hawaii, 1995
18. R.F. Casten and N.V. Zamfir  
 Radioactive Nuclear Beams and the Evolution of Collectivity in Nuclei"  
 Int. Summer School on Collective Motion and Nuclear Dynamics, Predeal, Romania, 1995  
 World Scientific, Singapore, 1996, p. 172-191
19. N.V. Zamfir  
 The role of  $\epsilon$  in deformed nuclei, phase transitions and yrast phenomenology  
 International Workshop on Spectrum Generating Algebras and Dynamical Symmetries in Many Body Systems with Applications to Nuclear Physics  
 ECT\* Trento, July 22 August 2, 1996

20. N.V. Zamfir, C.J. Barton, R.F. Casten, R.L. Gill, D.S. Brenner, and A. Zilges  
Coulomb Excitation of Radioactive Beams in Inverse Kinematics  
Proc. of the Int. Workshop on Physics of Unstable Nuclear Beams, Sao Paolo, Brazil,  
(1996)  
World Scientific, Singapore, 1997, Eds. C.A. Bertulani et al., p. 102-109
21. R.F. Casten and N.V. Zamfir  
Universal Correlations of Nuclear Observables and the Structure of Exotic Nuclei  
Proc. of the Int. Workshop on "Physics of Unstable Nuclear Beams"  
Sao Paolo, Brazil, August 28-31, 1996,  
World Scientific, Singapore, 1997, Eds. C.A. Bertulani et al., p. 214-221
22. D.S. Brenner, D.D. Warner, N.V. Zamfir, R.F. Casten, and B.D. Foy  
Valence Neutron-Proton Interaction Strength from Double Binding Energy Differences  
Proc. of the Int. Workshop on "Physics of Unstable Nuclear Beams"  
Sao Paolo, Brazil, August 28-31, 1996,  
World Scientific, Singapore, 1997, Eds. C.A. Bertulani et al., p. 110-118
23. N.V. Zamfir, R.F. Casten, P.D. Cottle, S. Deylitz, A. Gollwitzer, G. Graw, R. Hertenberger,  
B. Valnion, G. Cata-Danil, A. Oros, and W.T. Chou  
Octupole Fragmentation and the Structure of the O(6)-like Ba Nuclei  
9-th International Symposium on "Capture  $\gamma$ -ray Spectroscopy and Related Topics"  
Budapest, Hungary, October 8-12, 1996,  
eds. G. Molnar et al, Springer, Hungary, 1997, p. 80
24. R.F. Casten and N.V. Zamfir  
Empirical Proton-Neutron Interactions and Shell Model Interpretations"  
APS/AAPT Meeting, Symposium on Proton-Neutron Correlations in N=Z Nuclei.  
Washington, D.C. April 18-21, 1997  
Bulletin of American Physical Society 42 (1997), p. 978
25. N.V. Zamfir  
An old model in new clothes: A Structural Triangle for the GCM  
Workshop on Nuclear Physics with GEANIE at LANSCE  
Taos, New Mexico, USA, June 22-25, 1997, LA-UR-97-3743, p. 219-234
26. N.V. Zamfir and R.F. Casten  
Phonons and Phase Transitions in Finite Nuclei  
Applications of high-precision  $\gamma$ -spectroscopy  
University of Notre-Dame, USA, July 1-3 1998  
J. Res. National Inst. Standards and Technology 105 (2000) 147
27. R.F. Casten and N.V. Zamfir  
Phase Transitions and Phase Coexistence in Finite Nuclei  
Nuclear Structure 98  
Gatlinburg, August 10-15, 1998,  
AIP Conf. Proc. 481, ed. C. Baktash, p. 439-448
28. R.F. Casten and N.V. Zamfir  
Phase-shape transitions in the IBM  
Nuclear Models 1998

Camerino, Italy, October 11-14, 1998

29. R.F. Casten and N.V. Zamfir  
Nuclear Structure Studies with Radioactive Beams: Phase Transitions and the Evolution of Structure  
Structure and Stability of Nucleon and Nuclear Systems, Int. Summer School Predeal, Romania, August 24- September 5, 1998,  
World Scientific, 1999, eds. A.A. Raduta et al., p. 34-53.
30. R.F. Casten and N.V. Zamfir  
Phase Transitions and Phonons in Finite Nuclei  
Int. Conf on Perspectives in Nuclear Structure  
Bahamas, November 14-16, 1998,  
World Scientific, 1999, eds. J.H. Hamilton et al., p. 57-65
31. N.V. Zamfir, R. F. Casten, R. Krücken, C. W. Beausang, G. Cata-Danil, J. R. Cooper, Benyuan Liu, J. R. Novak, and C. J. Barton  
New signatures of phase transitional behavior in nuclei  
Conference on Exotic Nuclei and Atomic Masses (ENAM 98), BELLAIRE, MI (1998), ENAM 98: EXOTIC NUCLEI AND ATOMIC MASSES AIP Conf. Proc. 455, 614 (1998)
32. N.V. Zamfir  
Phase Coexistence in Low Energy Nuclear Spectra  
Symmetry Principles in Many-Body Phenomena  
Symposium in honor of J.N. Ginocchio's 60th birthday  
Honolulu, Hawaii, February 17-21, 1999
33. N.V. Zamfir  
 $K=0_2^+$  (multi)phonon states: old evidence and new experiments  
Algebraic Methods in Many Body Physics  
INT, Seattle, March 15-19, 1999
34. D.S. Brenner, B.E. Tomlin, C.J. Barton, N.V. Zamfir, R.L. Gill, B. Liu, G. Cata-Danil, R. Krücken, C.W. Beausang, J.R. Novak, J.R. Cooper, and R.F. Casten  
Mass measurement along the rp-process path  
217th American Chemical Society National Meeting  
Anaheim, California, March 21-25, 1999, NUCL-50, p.125
35. N.V. Zamfir  
Shape/phase coexistence in Sm isotopes  
Workshop Nuclear Structure in 21st century,  
Yale University, June 9-12, 1999
36. N.V. Zamfir  
Complementarity of  $(n, \gamma)$  and  $\beta$ -decay experiments in the search for multiphonon states  
Tenth Int. Symp. on Capture  $\gamma$ -ray Spectroscopy and Related Topics  
Santa Fe, USA, August 30- Sept. 3, 1999,  
AIP Conf. Proc. 529, New York 2000, Ed. S. Wender, p. 43
37. D.S. Brenner, B.E. Tomlin, C.J. Barton, N.V. Zamfir, R.L. Gill, G. Cata-Danil, R. Krücken, C.W. Beausang, R.F. Casten, J. Cederkäll, Benyuan Liu, M.A. Caprio, J.R. Novak, J.R. Cooper, and Z. Wang.

Mass measurement along the rp-process path  
Tenth Int. Symp. on Capture  $\gamma$ -ray Spectroscopy and Related Topics  
Santa Fe, USA, August 30- Sept. 3, 1999,  
AIP Conf. Proc. 529, New York 2000, Ed. S. Wender, p. 315-321.

38. N.V. Zamfir  
Complementarity of  $(n,\gamma)$  and  $\beta$ -decay experiments in the search for multiphonon states  
10th International Symposium on Capture Gamma-Ray Spectroscopy and Related Topics  
Santa Fe, New Mexico (USA), 1999, Los Alamos Natl Lab, Los Alamos Neutron Sci Ctr  
AIP Conf. Proc. 529, 43-50 (2000)
39. N.V. Zamfir  
Evolution of nuclear collectivity: empirical phenomenology and model interpretation  
Int. Symposium on Advances in Nuclear Physics  
Bucharest, Romania, Dec. 9-10, 1999  
World Scientific (Singapore), 2000, eds. D.Poenaru and S.Stoica, p. 312-319
40. N.V. Zamfir  
Quadrupole-octupole collective states in the light actinides and the spdf IBA model  
Int. Conf. Structure of the Nucleus at the Dawn of the Century  
Bologna, Italy, May 29-June 3, 2000,  
World Sci., 2001, eds. C.C. Bonsignori et al. p. 430-433
41. N.V. Zamfir  
Octupole Bands in the Actinides and the spdf IBA Model  
Int. Conf. Nuclear Structure and Related Topics  
Dubna, Russia, June 6-10, 2000  
Physics of Atomic Nuclei 64 (2001) 1062
42. N.V. Zamfir  
An Empirical Manifestation of the  $SU_{\text{spdf}}\{3\}$  Dynamical Symmetry  
International Symposium on Nuclear Structure Physics  
Göttingen, Germany, March 5-8, 2001  
World Scientific 2001, eds. R. Casten et al., p. 273-278
43. N.V. Zamfir  
New Symmetries in Transitional Nuclei and Radioactive Beam Experiments  
Int. Workshop on the Production of Radioactive Ion Beams  
Puri, India, Feb. 12-17, 2001  
Indian Journal of Physics 76S (2002) 95-101
44. N.V. Zamfir  
Critical point symmetries in nuclei and their empirical realizations  
International Nuclear Physics Summer School, Varna 2001.  
BgNS Transactions 7 (2002) 162-167
45. N.V. Zamfir  
Atomic nucleus as the laboratory for symmetry tests  
Praha SPIN 2001 Advanced Study Institute Summer School  
Czech J. Phys. 52 (2002) C631-641
46. C.J. Barton, D. Shapira, R.F. Casten, M.A. Caprio, J.Cooper, N.V. Zamfir, C.W. Beausang, J. Novak, R. Krücken, D.S. Brenner, R.L. Gill, T. Lewis, R. Lemmon, and D.D.Warner  
Experiments with Radioactive Nuclear Beams for Nuclear Structure

- Int. Conf. on Nuclear Structure Mapping the Triangle,  
Wyoming, USA, May 22-25, 2002,  
eds. A. Aprahamian et al., AIP 638, Melville, New York, 2002, p.51-56
47. J. J. Ressler, R. Krücken, C. W. Beausang, J. M. D'Auria, H. Amro, R. F. Casten, M. A. Caprio, G. Gürdal, Z. Harris, C. Hutter, A. A. Hecht, D. Meyer, M. Sciacciatano, N. V. Zamfir  
**SASSYER: A Gas-Filled Spectrometer at Yale**  
Int. Conf. on Nuclear Structure Mapping the Triangle,  
Wyoming, USA, May 22-25, 2002,  
eds. A. Aprahamian et al., AIP 638, Melville, New York, 2002, p.125-130
48. N.V. Zamfir  
Phase/shape transition in atomic nuclei and the interacting boson model  
The 224th ACS National Meeting, Boston, MA, August 18-22, 2002.
49. C.J. Barton, D.S. Brenner, D. Shapira, R.F. Casten, M. Caprio, J.R. Cooper, N.V. Zamfir, C. Beausang, J.R. Novak, R. Kruecken, R.L. Gill, T.A. Lewis, R. Lemmon, and D.D. Warner  
Coulomb Excitation Experiments with Radioactive Nuclear Beams  
The 224th ACS National Meeting, Boston, MA, August 18-22, 2002.
50. N.V. Zamfir and G.E. Fernandes  
The phase/shape transition critical point and the Interacting Boson Model  
Eleventh International Symposium on Capture Gamma Ray Spectroscopy and Related Topics  
Prague, Czech Republic, Sept. 2-6, 2002  
eds. J. Kvasil et al., World Scientific, Singapore, 2003, p.343-349
51. N.V. Zamfir  
The E1,E3 strengths and the octupole collectivity  
Mini-symposium on nuclear moments, Fall Meeting of the Division of Nuclear Physics of the American Physical Society, October 10-12, 2002, Michigan State University.
52. N.V. Zamfir  
Critical point nuclei and the Interacting Boson Model  
Fourth Biennial Workshop on Nuclear Structure Physics Near The Coulomb Barrier:  
Into the 21<sup>st</sup> Century, Yale University, New Haven, CT, June 2003.
53. N.V. Zamfir, E.A. McCutchan, R.F. Casten  
Searching for critical point nuclei in fission products''  
International Workshop New applications of nuclear fission,  
Bucharest, Romania, Sept. 7 -12, 2003,  
World Scientific, 2004, Eds. A.C. Mueller et al., p. 110-117
54. N. V. Zamfir, E.A. McCutchan, and R.F. Casten  
Critical Point nuclei and the Interacting Boson Model  
Proc. of Highly Specialized Seminar on Symmetries in Nuclear Structure,  
Erice, Italy, March 23-30, 2003  
eds. A. Vitturi et al., World Scientific, 2004, p.182-191
55. E.A. McCutchan, N.V. Zamfir, and R.F. Casten  
The excited 0<sup>+</sup> states in <sup>162</sup>Yb and the critical point phase/shape transition  
Seminar on Symmetries in Nuclear Structure,  
Proc. of Highly Specialized Seminar on Symmetries in Nuclear Structure,

Erice, Italy, March 23-30, 2003,  
eds. A. Vitturi et al., World Scientific, 2004, p.248-254

56. N.V. Zamfir  
Critical Point Nuclei Nuclear Structure and Related Topics  
Nuclear Structure and Related Topics, September 2-6, 2003 , Dubna, Russia  
Yadernaya Fizika, v.67, No 10, 2004
57. N.V. Zamfir, E.A. McCutchan, R.F. Casten  
The X(5) symmetry and the critical point in the IBM  
XV International School on Nuclear Physics, Neutron Physics and Nuclear Energy  
Sept. 9- 13, 2003, Varna, Bulgaria,  
BgNS Transactions 9, 65-69 (2004)
58. N. V. Zamfir, E. A. McCutchan, R. F. Casten  
Evolution of Nuclear Observables in the Spherical-Deformed Phase Transition and the  
Interacting Boson Model  
International Conference on Microscopic Studies of Collective Phenomena, Morelos,  
Mexico, 2004, NUCLEAR PHYSICS, LARGE AND SMALL  
AIP Conf. Proc. 726, 187 (2004)
59. N. V. Zamfir  
Evolution of Nuclear Observables in the spherical-deformed phase transition  
and the Interacting Boson Model  
Int. Conf Nuclear Physics, Large and Small: Microscopic Studies of Collective Phenomena  
Hacienda Cocoyoc in Morelos, Mexico, April 19-22, 2004,  
Eds. R. Bijker et al., AIP Conf. Proc. 726, NY 2004, p. 187
60. N.V. Zamfir, E.A. McCutchan, R.F. Casten  
The X(5) critical point nuclei and the interacting boson model symmetry triangle  
Physics of Atomic Nuclei  
Volume 67, Issue 10, October 2004, Pages 1829-1833
61. N.V. Zamfir  
The Samarium Saga and Nuclear Critical Phase/shape Transition  
ILL-IN2P3-Daphnia-workshop ``The neutron, a tool and an object  
for fundamental and nuclear physics and applications''  
Grenoble, France, May 6-7, 2004
62. N.V. Zamfir, D. Kusnezov, and M. Babilon  
Octupole Deformation in Z or N ~ 88 nuclei  
Int. Workshop: Blueprints for the Nucleus: from First Principles to Collective Motion  
May 17-23, Istanbul, Turkey  
International Journal of Modern Physics E 14, 147-155 (2005)
63. E.A. McCutchan, N.V. Zamfir, and R.F. Casten  
Searches for critical point symmetries using beta-decay studies at Yale  
International Conference on the Interface between NUclear STructure, Astrophysics  
and Reactions (Nustar '05), Surrey, Guildford, UK, January 5-8, 2005.  
J. Phys. G. 31 (2005) S1485-S1490
64. N.V. Zamfir  
Quantum phase transitions and experimental evidence in atomic nuclei  
XVI International School on Nuclear Physics, Neutron Physics and Nuclear Energy  
Sept. 8- 12, 2005, Varna, Bulgaria

65. N.V. Zamfir  
Gamma-band staggering and the shape/phase transitions.  
Workshop on Shape Phase Transitions and Critical Point Phenomena in Nuclei  
Athens, Greece, 9-11 November 2006
66. K. Andgren, S.F. Ashley, P.H. Regan, E.A. McCutchan, N.V. Zamfir,  
L. Amon, R.B. Cakirli, R.F. Casten, R.M. Clark, M.N. Erduran,  
G. Gündal, K.L. Keyesk, D.A. Meyer, A. Papenberg, N. Pietralla,  
C. Plettner, G. Rainovski, R.V. Ribas, N.J. Thomas, J. Vinson,  
D.D. Warner, V. Werner and E. Williams  
Recoil distance method lifetime measurements in  $^{107}\text{Cd}$  and  $^{103}\text{Pd}$ .  
International Conference on Frontiers in Nuclear Structure, Astrophysics and Reactions  
(FINUSTAR), Kos, Greece, 2005  
AIP Conf. Proc. 831, 391 (2006)
67. N.V. Zamfir  
The Bucharest Tandem Accelerator – part of the European Infrastructure  
6th International Conference of the Balkan Physical Union  
22-26 August 2006, Istanbul-TURKEY  
AIP CP899 (2007) edited by S.A. Cetin and I. Hikmet, p. 23-25
68. E.A. McCutchan, D. Bonatsos, and N.V. Zamfir  
Connecting the  $X(5)-\beta^2$ ,  $X(5)-\beta^4$ , and  $X(3)$  models to the shape/phase transition region of  
the interacting Boson Model  
The International Conf. on Nuclear Structure and Related Topics, Dubna, June 13 - 17,  
2006  
Yadernaia Fizika 70 (2007) 1-8
69. D. Bonatsos, E.A. McCutchan and N.V. Zamfir  
Connecting Critical Point Symmetries to the Shape/Phase Transition Region of the  
Interacting Boson Model  
Proc. Int. Summer School in Nuclear Physics, Predeal Romania, 28 August-9 Sept. 2006  
Collective Motion and Phase Transitions in Nuclear Systems, eds. A.A. Raduta et al.,  
Word Scientific 2007, p. 94-111
70. Nicolae Victor Zamfir  
The Bucharest Tandem Accelerator - part of the European Infrastructure  
6th International Conference of the Balkan-Physical-Union, Istanbul, Turkey, 2006, Six  
International Conference of the Balkan Physical Union  
AIP Conf. Proc. 899, 23-25 (2007)
71. N.V. Zamfir, D. Bucurescu, G. Căta-Danil, M. Ivașcu, and N. Mărginean  
Correlations of Energy Ratios for Collective Nuclear Bands  
Invited Lecture, Int. Conf. Capture Gamma-ray Spectroscopy, Cologne, Germany, Sept.  
2008
72. N. V. Zamfir, Sabina Anghel, G. Cata-Danil  
Phase/Shape Transitions and the Two Neutron Separation Energies  
AIP Conf. Proc. 1072, 118 (2008)
73. D. Bucurescu, N.V. Zamfir, G. Cata-Danil, M. Ivascu, N. Marginean  
Universality of Mallmann Correlations for Nuclear Band Structures

Invited Talk, Int. Conf. on Nuclear Physics and Astrophysics,  
Cappadochia, Turkey, 25-30 June 2008  
American Institute of Physics Proceedings Vol. 1072, New York, 2008, p. 27-31

74. N.V. Zamfir, S. Anghel, G. Cata-Danil  
Phase/shape Transition and Two Neutron Separation Energies  
Invited Talk, Int. Conf. on Nuclear Physics and Astrophysics,  
Cappadochia, Turkey, 25-30 June 2008  
American Institute of Physics Proceedings Vol. 1072, New York, 2008, p. 118-123
75. M. Dragusin, D. Galeriu, C. Ivan, Ana Stochioiu, and N.V. Zamfir  
Evaluation and monitoring of environmental radioactivity at National Institute of Physics  
and Nuclear Engineering Bucharest-Magurele  
Invited Talk, Int. Conf. Environmental Pollution and its Impact on Public Health,  
Brasov, 16-19 June 2008.
76. N.V. Zamfir, D. Bucurescu, G. Cata-Danil, M. Ivascu, and N. Marginean  
Energy ratio correlations for collective nuclear bands  
Invited Lecture, Conference on Nuclear Physics, Zakopane, Poland, 1-7 Sept. 2008  
Acta Physica Polonica B 40 (2009) 503-511
77. N.V. Zamfir, K. Allen, L. Biro, M. Dragusin  
Management of Spent Nuclear Fuel of Nuclear Research Reactor VVR-S at the National  
Institute of Physics and Nuclear Engineering, Bucharest, Romania  
Invited Talk, American Physical Society Meeting, Denver May 2-5, 2009
78. N.V. Zamfir, D. Bucurescu, G. Căta-Danil, M. Ivașcu, N. Mărginean  
Correlations of Energy Ratios for Collective Nuclear Bands,  
43rd Zakopane Conference on Nuclear Physics, Zakopane (2008)  
AIP Conf. Proc. 1090, 328 (2009)
79. N.V. Zamfir, D.D. Vamanu  
Radiological Emergency Planning – Motivations and Issues  
Workshop Nuclear Energy and Environment, organized on the occasion of the State Visit  
by H.M. King Albert II of the Belgians, Bucharest July 8 (2009)
80. N. V. Zamfir  
The ELI-Nuclear Physics Project  
Journal of Physics: Conference Series 366 (2012) 012052 ,  
XIX International School on Nuclear Physics, Neutron Physics and Applications, Varna,  
Bulgaria (2011)
81. N.V.Zamfir  
Fundamental Physics at ELI-NP  
Workshop on Laser Based High-Energy Fundamental Physics,  
Palaiseau, France, November 28-29, 2011
82. N. V. Zamfir  
Extreme Light Infrastructure – Nuclear Physics  
8th Tours Symposium on Nuclear Physics and Astrophysics,  
Black Forest, Germany, September 1-7, 2012

### ***G.List of editors***

1. D. Bucurescu, V. Ceausescu, N.V. Zamfir  
Nuclear Collective Dynamics  
World Scientific, Singapore, 1983, 521 pagini
2. G. Semenescu, I.A. Dorobantu, N.V. Zamfir  
Atomic and Nuclear Heavy Ion Interaction  
CIP, Bucharest, 1986.
5. M. Petrovici, N.V. Zamfir  
Recent Advances in Nuclear Physics  
World Scientific, Singapore, 1989, 537 pagini
3. N. Sandulescu, N.V. Zamfir  
Symmetries and Semiclassical Features of Nuclear Dynamics  
Revue Roumaine de Physique, Bucharest, 1987
4. M. Petrovici, N.V. Zamfir  
Recent Advances in Experimental Nuclear Physics  
Revue Roumaine de Physique, Bucharest, 1990
6. D. Bucurescu, G. Cata-Danil, N.V. Zamfir  
Recent Advances in Nuclear Structure  
World Scientific, Singapore, 1991, 514 pagini
7. A. Aprahamian, J. Cizewski, S. Pittel, and N.V. Zamfir  
Mapping the Triangle  
American Institute of Physics, Conf. Proc. 638, 2002,

## ***H. Other articles***

1. D. Bucurescu, G. Cata-Danil, N.V. Zamfir  
Bucharest Tandem Van de Graaff Accelerator  
Nuclear Physics News International, vol. 17, No. 1, 2007, p 5-10
2. N.V. Zamfir  
Invatand din trecut si privind catre viitor: relatiile noastre cu institutul Unificat de Cercetari Nucleare de la Dubna la jubilee  
Curierul de Fizica, nr. 55 (2007)
3. N.V. Zamfir  
Integrating in Europe  
Nuclear Physics News International  
Volume 18, 2008, p.3-4
4. N.V. Zamfir  
60 de ani de IFA  
Curierul de Fizica, nr. 64 (2009)
5. D. Habs, T. Tajima, N. V. Zamfir  
Extreme Light Infrastructure – Nuclear Physics (ELI-NP): New Horizons for Photon Physics in Europe  
Nuclear Physics News International  
Volume 21, 2011, p.23-29