

List of publications

I. Papers published in periodicals

1. **Dynamics of nuclear quadrupole excitations:**
J. Dobaczewski, S.G. Rohoziński, J. Srebrny,
Nukleonika **20** (1975) 981.
2. **Solutions of the Schrödinger equation with the Bohr Hamiltonian for the even-even barium and xenon nuclei:**
S.G. Rohoziński, J. Dobaczewski, J. Srebrny, B. Nerlo-Pomorska, K. Pomorski,
Nukleonika **22** (1977) 293.
3. **Nuclei from the barium region: nonaxial or gamma-soft:**
J. Dobaczewski, S.G. Rohoziński, J. Srebrny,
Z. Phys. **A282** (1977) 203.
4. **Microscopic dynamic calculations of collective states in xenon and barium isotopes:**
S.G. Rohoziński, J. Dobaczewski, B. Nerlo-Pomorska, K. Pomorski, J. Srebrny,
Nucl. Phys. **A292** (1977) 66.
5. **Study of the ^{124}Xe and ^{126}Xe structure:**
Ch. Droste, L. Goetting, T. Morek, J. Srebrny, J. Bucka, J. Dobaczewski, S.G. Rohoziński,
Z. Phys. **A284** (1978) 297.
6. **Collective quadrupole dynamics and the band structure of the nucleus ^{127}Cs :**
Ch. Droste, D. Chlebowska, J. Dobaczewski, F. Döna, A. Kerek, G. Leander, J. Srebrny, W. Waluś,
Nucl. Phys. **A341** (1980) 98.
7. **The quadrupole vibrational inertial function in the adiabatic time-dependent Hartree-Fock-Bogolyubov approximation:**
J. Dobaczewski, J. Skalski,
Nucl. Phys. **A369** (1981) 123.
8. **A unification of boson expansion theories. (I) Functional representations of fermion states:**
J. Dobaczewski,
Nucl. Phys. **A369** (1981) 213.

9. **A unification of boson expansion theories. (II) Boson expansions as provided by the functional representation method:**
J. Dobaczewski,
Nucl. Phys. A369 (1981) 237.
10. **A unification of boson expansion theories. (III) Applications:**
J. Dobaczewski,
Nucl. Phys. A380 (1982) 1.
11. **Isotope shifts and zero-point motion of the nuclear surface:**
J. Dobaczewski, P. Vogel, A. Winther,
Phys. Rev. C29 (1984) 1540.
12. **Hartree-Fock-Bogolyubov description of nuclei near the neutron-drip line:**
J. Dobaczewski, H. Flocard, J. Treiner,
Nucl. Phys. A422 (1984) 103.
13. **On the SU(6) dynamic symmetry in nuclei:**
J. Dobaczewski,
Ann. Univ. M. Curie-Skłodowska, Lublin, XL/XLI, 9 Sect. AAA (1986) 81.
14. **Violation of quadrupole sum rules in the Interacting Boson Model:**
J. Dobaczewski, S.G. Rohoziński, J. Srebrny,
Nucl. Phys. A462 (1987) 72.
15. **Structure of nuclei near ^{100}Sn and the $\pi g_{9/2} \Rightarrow \nu g_{7/2}$ Gamow-Teller beta decays:**
J. Dobaczewski, W. Nazarewicz, A. Płochocki, K. Rykaczewski, J. Żylicz,
Z. Phys. A329 (1988) 267.
16. **Deformed nuclear state as a quasiparticle-pair condensate:**
J. Dobaczewski, J. Skalski,
Phys. Rev. C38 (1988) 580.
17. **Nuclear deformation: A proton-neutron effect?:**
J. Dobaczewski, W. Nazarewicz, J. Skalski, T.R. Werner,
Phys. Rev. Lett. 60 (1988) 2254.
18. **Quadrupole collective models from the Hartree-Fock standpoint:**
J. Dobaczewski, J. Skalski,
Phys. Rev. C40 (1989) 1025.
19. **Composition and equation of state of cold catalyzed matter below neutron drip:**
P. Haensel, J.L. Zdunik, J. Dobaczewski,
Astron. and Astrophys. 222 (1989) 353.
20. **Charge densities of ^{208}Pb , ^{206}Pb , and ^{205}Tl and the mean-field approximation:**
L. Bennour, P.-H. Heenen, P. Bonche, J. Dobaczewski, H. Flocard,
Phys. Rev. C40 (1989) 2834.
21. **Fermion expansions for boson systems:**
J. Dobaczewski,
Nucl. Phys. A506 (1990) 293.
22. **Analysis of the Generator Coordinate Method in a study of shape isomerism in ^{194}Hg :**
P. Bonche, J. Dobaczewski, H. Flocard, P.-H. Heenen, J. Meyer,
Nucl. Phys. A510 (1990) 466.

23. **A new representation of the BCS states and the quadrupole collective excitations:**
J. Dobaczewski,
Phys. Lett. **241B** (1990) 289.
24. **Quadrupole collective correlations and the depopulation of the superdeformed bands in mercury:**
P. Bonche, J. Dobaczewski, H. Flocard, P.-H. Heenen, S.J. Krieger, J. Meyer, M.S. Weiss,
Nucl. Phys. **A519** (1990) 509.
25. **Octupole softness of superdeformed ^{194}Pb :**
P. Bonche, S.J. Krieger, M.S. Weiss, J. Dobaczewski, H. Flocard, P.-H. Heenen,
Phys. Rev. Lett. **66** (1991) 876.
26. **Generator coordinate method for triaxial quadrupole dynamics in strontium isotopes:**
P. Bonche, J. Dobaczewski, H. Flocard, P.-H. Heenen,
Nucl. Phys. **530** (1991) 149.
27. **Projection onto physical boson states in a collective subspace:**
J. Dobaczewski, H.B. Geyer, F.J.W. Hahne,
Phys. Rev. **C44** (1991) 1030.
28. **Pairing vibrations and stability of superdeformed states:**
J. Meyer, P. Bonche, J. Dobaczewski, H. Flocard, P.-H. Heenen,
Nucl. Phys. **A533** (1991) 307.
29. **Dynamical symmetries, multiclustering, and octupole susceptibility in superdeformed and hyperdeformed nuclei:**
W. Nazarewicz, J. Dobaczewski,
Phys. Rev. Lett. **68** (1992) 154.
30. **Generator coordinate kernels between zero- and two-quasiparticle BCS states:**
N. Tajima, H. Flocard, P. Bonche, J. Dobaczewski, P.-H. Heenen,
Nucl. Phys. **A542** (1992) 355.
31. **Diabatic effects in ^{186}Pb : A generator coordinate analysis:**
N. Tajima, H. Flocard, P. Bonche, J. Dobaczewski, P.-H. Heenen,
Nucl. Phys. **A551** (1993) 409.
32. **Comment on “Pairing correlations studied in the two-level model”:**
J. Dobaczewski, W. Nazarewicz,
Phys. Rev. **C47** (1993) 2418.
33. **Hartree-Fock and Hartree-Fock-Bogoliubov calculations of superdeformed bands:**
H. Flocard, B.Q. Chen, B. Gall, P. Bonche, J. Dobaczewski, P.-H. Heenen, M.S. Weiss,
Nucl. Phys. **A557** (1993) 559c.
34. **Generator coordinate method for triaxial quadrupole dynamics in strontium isotopes. II Results for particle-number projected states:**
P.-H. Heenen, P. Bonche, J. Dobaczewski, H. Flocard,
Nucl. Phys. **A561** (1993) 367.
35. **Approximate particle number projection for rotating nuclei:**
P. Magierski, S. Ćwiok, J. Dobaczewski, W. Nazarewicz,
Phys. Rev. **C48** (1993) 1686.

36. **Particle-drip lines from the Hartree-Fock-Bogoliubov theory with Skyrme interaction:**
R. Smolańczuk, J. Dobaczewski,
Phys. Rev. C **48** (1993) R2166.
37. **Boson-fermion mappings for odd systems from supercoherent states:**
J. Dobaczewski, F.G. Scholtz, H.B. Geyer,
Phys. Rev. C **48** (1993) 2313.
38. **Nuclear shell structure at particle drip lines:**
J. Dobaczewski, I. Hamamoto, W. Nazarewicz, J.A. Sheikh,
Phys. Rev. Lett. **72** (1994) 981.
39. **Quadrupole collective states in a large single- j shell:**
K. Burzyński, J. Dobaczewski,
Acta Phys. Pol. B **25** (1994) 655.
40. **Nuclear shell structure at particle drip lines:**
J. Dobaczewski, I. Hamamoto, W. Nazarewicz, J.A. Sheikh,
Acta Phys. Pol. B **25** (1994) 541.
41. **Spurious states in boson calculations – spectre or reality?:**
P. Navrátil, H.B. Geyer, J. Dobeš, J. Dobaczewski,
Nucl. Phys. A **570** (1994) 225c.
42. **Superdeformed rotational bands in the mercury region; a cranked Skyrme-Hartree-Fock-Bogoliubov study:**
B. Gall, P. Bonche, J. Dobaczewski, H. Flocard, P.-H. Heenen,
Z. Phys. A **348** (1994) 183.
43. **Comment on “Shell effects in nuclei near the neutron-drip line”:**
J. Dobaczewski, W. Nazarewicz,
Phys. Rev. Lett. **73** (1994) 1869.
44. **Microscopic approach to collective motion:**
P. Bonche, E. Chabanat, B.Q. Chen, J. Dobaczewski, H. Flocard, B. Gall, P.-H. Heenen, J. Meyer,
N. Tajima, M.S. Weiss,
Nucl. Phys. A **574** (1994) 185c.
45. **Microscopic aspects of nuclear deformation:**
T.R. Werner, J. Dobaczewski, M.W. Guidry, W. Nazarewicz, J.A. Sheikh,
Nucl. Phys. A **578** (1994) 1.
46. **Mean-field description of ground-state properties of drip-line nuclei: Shell-correction method:**
W. Nazarewicz, T.R. Werner, J. Dobaczewski,
Phys. Rev. C **50** (1994) 2860.
47. **Isospin impurities in ground states of $N=Z$ nuclei near the proton-drip line:**
J. Dobaczewski, I. Hamamoto,
Phys. Lett. B **345** (1995) 181.
48. **The $\Delta I=4$ bifurcation in superdeformed bands:**
P. Magierski, K. Burzyński, J. Dobaczewski, W. Nazarewicz,
Acta Phys. Pol. B **26** (1995) 291.

49. **Multiclustering and physics of exotic nuclear shapes:**
W. Nazarewicz, S. Ówiok, J. Dobaczewski, J.X. Saladin,
Acta Phys. Pol. **B26** (1995) 189.
50. **Limits of Proton Stability Near ^{100}Sn :**
J. Dobaczewski, W. Nazarewicz,
Phys. Rev. **C51** (1995) R1070.
51. **Quadrupole-collective states in a large single- j shell:**
K. Burzyński, J. Dobaczewski,
Phys. Rev. **C51** (1995) 1825.
52. **Physics of exotic nuclear states:**
W. Nazarewicz, J. Dobaczewski, T.R. Werner,
Physica Scripta **T56** (1995) 9.
53. **Closed shells at drip-line nuclei:**
J. Dobaczewski, W. Nazarewicz, T.R. Werner,
Physica Scripta **T56** (1995) 15.
54. **Hexadecapole interaction and the $\Delta I=4$ staggering effect in rotational bands:**
K. Burzyński, P. Magierski, J. Dobaczewski, W. Nazarewicz,
Physica Scripta **T56** (1995) 228.
55. **Quadrupole and octupole correlations in normal, superdeformed, and hyperdeformed states of ^{194}Pb :**
J. Meyer, P. Bonche, M.S. Weiss, J. Dobaczewski, H. Flocard, P.-H. Heenen,
Nucl. Phys. **A588** (1995) 597.
56. **Influence of shell-quenching far from stability on the astrophysical r-process:**
B. Chen, J. Dobaczewski, K.-L. Kratz, K. Langanke, B. Pfeiffer, F.-K. Thielemann, P. Vogel,
Phys. Lett. **B355** (1995) 37.
57. **SDG fermion-pair algebraic SO(12) and Sp(10) models and their boson realizations:**
P. Navrátil, H.B. Geyer, J. Dobeš, J. Dobaczewski,
Ann. Phys. (N.Y.), **243** (1995) 218.
58. **Boson-fermion mapping of collective fermion-pair algebras:**
P. Navrátil, H.B. Geyer, J. Dobaczewski,
Phys. Rev. **C52** (1995) 1394.
59. **Time-odd components in the mean field of rotating superdeformed nuclei:**
J. Dobaczewski, J. Dudek,
Phys. Rev. **C52** (1995) 1827; **C55** (1997) E3177.
60. **Superdeformed rotational bands with density dependent pairing interactions:**
J. Terasaki, P.-H. Heenen, P. Bonche, J. Dobaczewski, H. Flocard,
Nucl. Phys. **A593** (1995) 1.
61. **Excited superdeformed band in ^{142}Sm identical to ^{146}Gd :**
G. Hackman, R. Wadsworth, D.S. Haslip, R.M. Clark, J. Dobaczewski, J. Dudek, S. Flibotte, K. Hauschild, I.M. Hibbert, I.-Y. Lee, S.M. Mullins, A.O. Macchiavelli, S. Pilotte, A.T. Semple, I. Thorslund, J. Timar, P. Vaska, J.C. Waddington, L. Walker,
Phys. Rev. **C52** (1995) R2293.

62. **Microscopic study of a $\mathcal{C}_4$ -symmetry hypothesis in $A \sim 150$ superdeformed nuclei. Deformed Woods-Saxon mean field:**
W.D. Luo, A. Bouguettoucha, J. Dobaczewski, J. Dudek, X. Li,
Phys. Rev. C **52** (1995) 2989.
63. **Physics of drip-line nuclei:**
T.R. Werner, J. Dobaczewski, W. Nazarewicz,
Revista Mexicana de Física **41** (1995) 1.
64. **Neutron radii and skins in the Hartree-Fock-Bogoliubov calculations:**
J. Dobaczewski, W. Nazarewicz, T.R. Werner,
Z. Phys. A **354** (1996) 27.
65. **Time-odd components in the rotating mean field and identical bands:**
J. Dobaczewski, J. Dudek,
Acta Phys. Pol. B **27** (1996) 45.
66. **On the quality of microscopic descriptions of nuclear mass:**
Z. Patyk, A. Baran, J.F. Berger, J. Dechargé, J. Dobaczewski, R. Smolańczuk, A. Sobiczewski,
Acta Phys. Pol. B **27** (1996) 457.
67. **Calculation of decay properties of very neutron-rich nuclei with a modified Nilsson potential:**
B. Pfeiffer, K.-L. Kratz, J. Dobaczewski, P. Möller,
Acta Phys. Pol. B **27** (1996) 475.
68. **Proton localization in neutron star matter:**
K. Burzyński, J. Dobaczewski,
Acta Phys. Pol. B **27** (1996) 563.
69. **Structure of proton drip-line nuclei around doubly magic ^{48}Ni :**
W. Nazarewicz, J. Dobaczewski, T.R. Werner, J.A. Maruhn, P.G. Reinhard,
K. Rutz, C.R. Chinn, A.S. Umar, M.R. Strayer,
Phys. Rev. C **53** (1996) 740.
70. **Mean-field description of ground-state properties of drip-line nuclei: Pairing and continuum effects:**
J. Dobaczewski, W. Nazarewicz, T.R. Werner, J.F. Berger, C.R. Chinn, J. Dechargé,
Phys. Rev. C **53** (1996) 2809.
71. **Boson-fermion Dyson mapping and supersymmetry in fermion systems:**
P. Navrátil, H.B. Geyer, J. Dobaczewski,
Nucl. Phys. A **607** (1996) 23.
72. **Antiprotonic studies of nuclear neutron haloes:**
S. Wycech, J. Skalski, R. Smolańczuk, J. Dobaczewski, J.R. Rook,
Phys. Rev. C **54** (1996) 1832.
73. **Additivity of Quadrupole Moments in Superdeformed Bands: Single-Particle Motion at Extreme Conditions:**
W. Satuła, J. Dobaczewski, J. Dudek, W. Nazarewicz,
Phys. Rev. Lett. **77** (1996) 5182.
74. **Shell Structure of the Superheavy Elements:**
S. Ówiok, J. Dobaczewski, P.-H. Heenen, P. Magierski, W. Nazarewicz,
Nucl. Phys. A **611** (1996) 211.

75. **Quadrupole and hexadecapole correlations in rotating nuclei studied within the single- j shell model:**
P. Magierski, K. Burzyński, E. Perlińska, J. Dobaczewski, W. Nazarewicz,
Phys. Rev. C **55** (1997) 1236.
76. **Solution of the Skyrme-Hartree-Fock equations in the Cartesian deformed harmonic oscillator basis. (I) The method:**
J. Dobaczewski, J. Dudek,
Comp. Phys. Commun. **102** (1997) 166.
77. **Solution of the Skyrme-Hartree-Fock equations in the Cartesian deformed harmonic oscillator basis. (II) The program HFODD:**
J. Dobaczewski, J. Dudek,
Comp. Phys. Commun. **102** (1997) 183.
78. **The octupole susceptibility of superheavy nuclei:**
S. Ćwiok, J. Dobaczewski, P.-H. Heenen, P. Magierski, W. Nazarewicz,
Prog. Part. and Nucl. Phys., **38** (1997) 97.
79. **Drip-line nuclei in self-consistent mean-field theory:**
T.R. Werner, J. Dobaczewski, W. Nazarewicz,
Z. Phys. A **358** (1997) 169.
80. **Uncertainties in direct neutron capture calculations due to nuclear structure models:**
T. Rauscher, K.-L. Kratz, H. Oberhummer, J. Dobaczewski, P. Möller, M. Sharma,
Nucl. Phys. A **621** (1997) 327c.
81. **Shell effects in superdeformed minima:**
P.-H. Heenen, J. Dobaczewski, W. Nazarewicz, P. Bonche, T.L. Khoo,
Phys. Rev. C **57** (1998) 1719.
82. **Dependence of direct neutron capture on nuclear structure models:**
T. Rauscher, R. Bieber, H. Oberhummer, K.-L. Kratz, J. Dobaczewski, P. Möller, M. Sharma,
Phys. Rev. C **57** (1998) 2031.
83. **Prompt proton decay of a well-deformed rotational band in ^{58}Cu :**
D. Rudolph, C. Baktash, J. Dobaczewski, W. Nazarewicz, W. Satuła, M.J. Brinkman, M. Devlin,
H.-Q. Jin, D.R. LaFosse, L.L. Riedinger, D.G. Sarantites, C.-H. Yu,
Phys. Rev. Lett. **80** (1998) 3018.
84. **High-spin γ -ray spectroscopy in the vicinity of ^{56}Ni :**
D. Rudolph, C. Baktash, W. Satuła, J. Dobaczewski, W. Nazarewicz, M.J. Brinkman, M. Devlin,
H.-Q. Jin, D.R. LaFosse, L.L. Riedinger, D.G. Sarantites, C.-H. Yu,
Nucl. Phys. A **630** (1998) 417c.
85. **Theoretical aspects of science with radioactive nuclear beams:**
J. Dobaczewski, W. Nazarewicz,
Phil. Trans. R. Soc. Lond. A **356** (1998) 2007.
86. **Odd-even staggering of nuclear masses: pairing or shape effect?:**
W. Satuła, J. Dobaczewski, W. Nazarewicz,
Phys. Rev. Lett. **81** (1998) 3599.
87. **Masses and radii of spherical nuclei calculated in various microscopic approaches:**
Z. Patyk, A. Baran, J.F. Berger, J. Dechargé, J. Dobaczewski, P. Ring, A. Sobczewski,
Phys. Rev. C **59** (1999) 704.

88. **Rotational bands in the doubly magic nucleus ^{56}Ni :**
D. Rudolph, C. Baktash, M.J. Brinkman, E. Caurier, D.J. Dean, M. Devlin, J. Dobaczewski, P.-H. Heenen, H.-Q. Jin, D.R. LaFosse, W. Nazarewicz, F. Nowacki, A. Poves, L.L. Riedinger, D.G. Sarantites, W. Satuła, C.-H. Yu,
Phys. Rev. Lett. **82** (1999) 3763.
89. **β decay rates of r-process waiting-point nuclei in a self-consistent approach:**
J. Engel, M. Bender, J. Dobaczewski, W. Nazarewicz, R. Surman,
Phys. Rev. **C60** (1999) 014302.
90. **Shape coexistence and the effective nucleon-nucleon interaction:**
P.-G. Reinhard, D.J. Dean, W. Nazarewicz, J. Dobaczewski, J.A. Maruhn, M.R. Strayer,
Phys. Rev. **C60** (1999) 014316.
91. **Comparison of superdeformed bands in ^{61}Zn and ^{60}Zn : Possible evidence for $T = 0$ pairing:**
C.-H. Yu, C. Baktash, J. Dobaczewski, J.A. Cameron, C. Chitu, M. Devlin, J. Eberth, A. Galindo-Uribarri, D.S. Haslip, D.R. LaFosse, T.J. Lampman, I.-Y. Lee, F. Lerma, A.O. Macchiavelli, S.D. Paul, D.C. Radford, D. Rudolph, D.G. Sarantites, C.E. Svensson, J.C. Waddington, J.N. Wilson,
Phys. Rev. **C60** (1999) 031305(R).
92. **Continuum effects for the mean-field and pairing properties of weakly bound nuclei:**
K. Bennaceur, J. Dobaczewski, M. Płoszajczak,
Phys. Rev. **C60** (1999) 034308.
93. **Structure of nuclei at extreme values of the isospin:**
J. Dobaczewski,
Acta Phys. Pol. **B30** (1999) 1647.
94. **Superdeformed bands in ^{32}S and neighboring nuclei predicted within the Hartree-Fock method:**
H. Molique, J. Dobaczewski, J. Dudek,
Phys. Rev. **C61** (2000) 044304.
95. **Quadrupole deformations of neutron-drip-line nuclei studied within the Skyrme Hartree-Fock-Bogoliubov approach:**
M.V. Stoitsov, J. Dobaczewski, P. Ring, S. Pittel,
Phys. Rev. **C61** (2000) 034311.
96. **Nuclear skins and halos in the mean-field theory:**
S. Mizutori, J. Dobaczewski, G.A. Lalazissis, W. Nazarewicz, P.-G. Reinhard,
Phys. Rev. **C61** (2000) 044326.
97. **Generalization of the Bloch-Messiah-Zumino theorem:**
J. Dobaczewski,
Phys. Rev. **C62** (2000) 017301.
98. **Point symmetries in the Hartree-Fock approach: Densities, shapes and currents:**
J. Dobaczewski, J. Dudek, S.G. Rohoziński, T.R. Werner,
Phys. Rev. **C62** (2000) 014310.
99. **Point symmetries in the Hartree-Fock approach: Symmetry-breaking schemes:**
J. Dobaczewski, J. Dudek, S.G. Rohoziński, T.R. Werner,
Phys. Rev. **C62** (2000) 014311.

100. **Microscopic study of superdeformed rotational bands in ^{151}Tb :**
N. El Aouad, J. Dobaczewski, J. Dudek, X. Li, W.D. Luo, H. Molique, A. Bouguettoucha, Th. Byrski, F.A. Beck, D. Curien, G. Duchêne, Ch. Finck, B. Kharraja,
Nucl. Phys. A **676** (2000) 155.
101. **Solution of the Skyrme-Hartree-Fock equations in the Cartesian deformed harmonic oscillator basis. (III) HFODD (v1.75r): a new version of the program:**
J. Dobaczewski, J. Dudek,
Comp. Phys. Commun. **131** (2000) 164.
102. **Superdeformed and highly deformed bands in ^{65}Zn and neutron-proton interactions in Zn isotopes:**
C.-H. Yu, C. Baktash, J. Dobaczewski, J.A. Cameron, M. Devlin, J. Eberth, A. Galindo-Uribarri, D.S. Haslip, D.R. LaFosse, T.J. Lampman, I.-Y. Lee, F. Lerma, A.O. Macchiavelli, S.D. Paul, D.C. Radford, D. Rudolph, D.G. Sarantites, C.E. Svensson, J.C. Waddington, J.N. Wilson,
Phys. Rev. C **62** (2000) 041301(R).
103. **Yrast superdeformed band in ^{59}Cu :**
C. Andreoiu, D. Rudolph, C.E. Svensson, A.V. Afanasjev, J. Dobaczewski, I. Ragnarsson, C. Baktash, J. Eberth, C. Fahlander, D.S. Haslip, D.R. LaFosse, S.D. Paul, D.G. Sarantites, H.G. Thomas, J.C. Waddington, W. Weintraub, J.N. Wilson, C.-H. Yu,
Phys. Rev. C **62** (2000) 051301(R).
104. **Pairing anti-halo effect:**
K. Bennaceur, J. Dobaczewski, M. Płoszajczak,
Phys. Lett. B **496** (2000) 154.
105. **Odd-even staggering of binding energies as a consequence of pairing and mean-field effects:**
J. Dobaczewski, P. Magierski, W. Nazarewicz, W. Satuła, Z. Szymański,
Phys. Rev. C **63** (2001) 024308.
106. **Rotational bands near ^{56}Ni :**
W. Reviol, D.G. Sarantites, R.J. Charity, V. Tomov, D. Rudolph, R.M. Clark, M. Cromaz, P. Fallon, A.O. Macchiavelli, M.P. Carpenter, D. Seweryniak, J. Dobaczewski,
Nucl. Phys. A **682** (2001) 28c.
107. **Pairing Interaction and Self-Consistent Densities in Neutron-Rich Nuclei:**
J. Dobaczewski, W. Nazarewicz, P.-G. Reinhard,
Nucl. Phys. A **693** (2001) 361.
108. **Rotational properties of neutron drip-line nuclei:**
W. Nazarewicz, J. Dobaczewski, M. Matev, S. Mizutori, W. Satuła,
Acta Phys. Pol. B **32** (2001) 2349.
109. **Global lifetime measurements of highly-deformed and other rotational structures in the $A \sim 135$ light rare-earth region: probing the single-particle motion in a rotating potential:**
M.A. Riley, R.W. Laird, F.G. Kondev, D.E. Archer, T.B. Brown, R.M. Clark, M. Devlin, P. Fallon, D.J. Hartley, I.M. Hibbert, D.T. Joss, D.R. LaFosse, P.J. Nolan, N.J. O'Brien, E.S. Paul, J. Pfohl, D.G. Sarantites, R.K. Sheline, S.L. Shepherd, J. Simpson, R. Wadsworth, M.T. Matev, A.V. Afanasjev, J. Dobaczewski, G.A. Lalazissis, W. Nazarewicz, W. Satuła,
Acta Phys. Pol. B **32** (2001) 2683.
110. **Highly deformed band structure in ^{57}Co :**
W. Reviol, D.G. Sarantites, R.J. Charity, V. Tomov, J. Dobaczewski, D. Rudolph, R.M. Clark, M.

- Cromaz, P. Fallon, A.O. Macchiavelli, M.P. Carpenter, D. Seweryniak,
Phys. Rev. C **65** (2002) 034309.
111. **The shears mechanism in ^{142}Gd in the Skyrme-Hartree-Fock method with the tilted-axis cranking:**
P. Olbratowski, J. Dobaczewski, J. Dudek, T. Rząca-Urban, Z. Marcinkowska, R. M. Lieder,
Acta Phys. Pol. B **33** (2002) 389.
112. **Quadrupole moments of highly-deformed structures in the $A\sim 135$ region: Probing the single-particle motion in a rotating potential:**
R.W. Laird, F.G. Kondev, M.A. Riley, D.E. Archer, T.B. Brown, R.M. Clark M. Devlin, P. Fallon, D.J. Hartley, I.M. Hibbert, D.T. Joss, D.R. LaFosse, P.J. Nolan, N.J. O'Brien E.S. Paul, J. Pfohl, D.G. Sarantites, R.K. Sheline, S.L. Shepherd, J. Simpson, R. Wadsworth, M.T. Matev, A.V. Afanasjev, J. Dobaczewski, G.A. Lalazissis, W. Nazarewicz, W. Satuła,
Phys. Rev. Lett. **88** (2002) 152501.
113. **Gamow-Teller strength and the spin-isospin coupling constants of the Skyrme energy functional:**
M. Bender, J. Dobaczewski, J. Engel, W. Nazarewicz,
Phys. Rev. C **65** (2002) 054322.
114. **Nuclear ground-state properties from mean-field calculation:**
J. Dobaczewski, W. Nazarewicz, M.V. Stoitsov,
Eur. Phys. J. A **15** (2002) 21.
115. **Mean-field and pairing properties of exotic nuclei: exploring the nuclear landscape:**
J. Dobaczewski, W. Nazarewicz,
Prog. Theor. Phys. **146** (2002) 70.
116. **$T=0$ neutron-proton pairing correlations in the superdeformed rotational bands around ^{60}Zn :**
J. Dobaczewski, J. Dudek, R. Wyss,
Phys. Rev. C **67** (2003) 034308.
117. **Prospects for New Science with EM Devices:**
W. Nazarewicz, J. Dobaczewski, N. Michel, M. Płoszajczak, M.V. Stoitsov, J. Terasaki,
Nucl. Instr. Meth. **204** (2003) 1.
118. **Time-reversal violating Schiff moment of ^{225}Ra :**
J. Engel, M. Bender, J. Dobaczewski, J.H. de Jesus, P. Olbratowski,
Phys. Rev. C **68** (2003) 025501.
119. **Systematic study of deformed nuclei at the drip lines and beyond:**
M.V. Stoitsov, J. Dobaczewski, W. Nazarewicz, S. Pittel, D.J. Dean,
Phys. Rev. C **68** (2003) 054312.
120. **Local Density Approximation for proton-neutron pairing correlations: Formalism:**
E. Perlińska, S.G. Rohoziński, J. Dobaczewski, W. Nazarewicz,
Phys. Rev. C **69** (2004) 014316.
121. **Solution of the Skyrme-Hartree-Fock-Bogolyubov equations in the Cartesian deformed harmonic-oscillator basis. (IV) HFODD (v2.08i): a new version of the program:**
J. Dobaczewski, P. Olbratowski,
Comp. Phys. Commun. **158** (2004) 158.

122. **Atomic nucleus as a laboratory for fundamental processes:**
J. Dobaczewski,
Acta Phys. Pol. **B35** (2004) 1303.
123. **Probing the densities of the Sn isotopes:**
K. Amos, S. Karataglidis, J. Dobaczewski,
Phys. Rev. **C70** (2004) 024607.
124. **Critical frequency in nuclear chiral rotation:**
P. Olbratowski, J. Dobaczewski, J. Dudek, W. Płóciennik,
Phys. Rev. Lett. **93** (2004) 052501.
125. **Axially deformed solution of the Skyrme-Hartree-Fock-Bogolyubov equations using the Transformed Harmonic Oscillator basis. The program HFBTHO (v1.66p):**
M.V. Stoitsov, J. Dobaczewski, W. Nazarewicz, P. Ring,
Comp. Phys. Commun. **167** (2005) 43.
126. **Self-Consistent Description of Multipole Strength in Exotic Nuclei: Method:**
J. Terasaki, J. Engel, M. Bender, J. Dobaczewski, W. Nazarewicz, M.V. Stoitsov,
Phys. Rev. **C71** (2005) 034310.
127. **Solution of the Skyrme-Hartree-Fock-Bogolyubov equations in the Cartesian deformed harmonic-oscillator basis. (V) HFODD (v2.08k): a new version of the program:**
J. Dobaczewski, P. Olbratowski,
Comp. Phys. Commun. **167** (2005) 214.
128. **Coordinate-space solution of the Skyrme-Hartree-Fock-Bogolyubov equations within spherical symmetry. The program HFBRAD (v1.00):**
K. Bennaceur, J. Dobaczewski,
Comp. Phys. Commun. **168** (2005) 96.
129. **Skyrme-Hartree-Fock calculations of fission barriers of the heaviest and superheavy nuclei:**
A. Staszczak, J. Dobaczewski, W. Nazarewicz,
Int. Jour. Mod. Phys. E **14** (2005) 395.
130. **Nuclear time-reversal violation and the Schiff moment of ^{225}Ra :**
J. Dobaczewski, J. Engel,
Phys. Rev. Lett. **94** (2005) 232502.
131. **Skyrme-QRPA calculations of multipole strength in exotic nuclei:**
J. Terasaki, J. Engel, M. Bender, J. Dobaczewski, W. Nazarewicz, M.V. Stoitsov,
Eur. Phys. J. **A25,s01** (2005) 539.
132. **Large-scale HFB calculations for deformed nuclei with the exact particle-number projection:**
M.V. Stoitsov, J. Dobaczewski, W. Nazarewicz, J. Terasaki,
Eur. Phys. J. **A25,s01** (2005) 567.
133. **On the non-unitarity of the Bogoliubov transformation due to the quasiparticle space truncation:**
J. Dobaczewski, P. Borycki, W. Nazarewicz, M.V. Stoitsov,
Eur. Phys. J. **A25,s01** (2005) 541.
134. **Fission barriers of superheavy nuclei in the Skyrme-Hartree-Fock model:**
A. Staszczak, J. Dobaczewski, W. Nazarewicz,
Int. Jour. Mod. Phys. E **15** (2006) 302.

135. **Skyrme-Hartree-Fock and Hartree-Fock-Bogolyubov calculations for nuclei with tetrahedral deformation:**
P. Olbratowski, J. Dobaczewski, P. Powałowski, M. Sadziak, K. Zberecki,
Int. Jour. Mod. Phys. E **15** (2006) 333.
136. **Rotation of tetrahedral nuclei in the cranking model:**
N. Schunck, P. Olbratowski, J. Dudek, J. Dobaczewski,
Int. Jour. Mod. Phys. E **15** (2006) 490.
137. **Pairing renormalization and regularization within the local density approximation:**
P. Borycki, J. Dobaczewski, W. Nazarewicz, M.V. Stoitsov,
Phys. Rev. **C73** (2006) 044319.
138. **Large-scale self-consistent nuclear mass calculations:**
M.V. Stoitsov, J. Dobaczewski, W. Nazarewicz, P. Borycki,
International Journal of Mass Spectrometry, **251** (2006) 243.
139. **Search for the Skyrme-Hartree-Fock solutions for chiral rotation in $N=75$ isotones:**
P. Olbratowski, J. Dobaczewski, J. Dudek,
Phys. Rev. **C73** (2006) 054308.
140. **An island of rare earth nuclei with tetrahedral and octahedral symmetries: possible experimental evidence:**
J. Dudek, D. Curien, N. Dubray, J. Dobaczewski, V. Pangon, P. Olbratowski, N. Schunck,
Phys. Rev. Lett. **97** (2006) 072501.
141. **Pairing properties of superheavy nuclei:**
A. Staszczak, J. Dobaczewski, W. Nazarewicz,
Int. Jour. Mod. Phys. E **16** (2007) 310.
142. **Angular-momentum projection of cranked symmetry-unrestricted Slater determinants:**
H. Zduńczuk, J. Dobaczewski, W. Satuła,
Int. Jour. Mod. Phys. E **16** (2007) 377.
143. **Collective inertia and fission barriers within the Skyrme-Hartree-Fock theory:**
A. Baran, A. Staszczak, J. Dobaczewski, W. Nazarewicz,
Int. Jour. Mod. Phys. E **16** (2007) 443.
144. **Nuclei with tetrahedral symmetry:**
J. Dudek, J. Dobaczewski, N. Dubray, A. Gózdź, V. Pangon, N. Schunck,
Int. Jour. Mod. Phys. E **16** (2007) 516.
145. **Bimodal fission in the Skyrme-Hartree-Fock approach:**
A. Staszczak, J. Dobaczewski, W. Nazarewicz,
Acta Phys. Pol. **B38** (2007) 1589.
146. **Shell Structure of Exotic Nuclei:**
J. Dobaczewski, N. Michel, W. Nazarewicz, M. Płoszajczak, J. Rotureau,
Prog. Part. Nucl. Phys. **59** (2007) 432.
147. **Variation after particle-number projection for the HFB method with the Skyrme energy density functional:**
M.V. Stoitsov, J. Dobaczewski, R. Kirchner, W. Nazarewicz, J. Terasaki,
Phys. Rev. **C76** (2007) 014308.

148. **Additivity of effective quadrupole moments and angular momentum alignments in the $A \sim 130$ nuclei:**
M. Matev, A.V. Afanasjev, J. Dobaczewski, G.A. Lalazissis, W. Nazarewicz,
Phys. Rev. C **76** (2007) 034304.
149. **Angular momentum projection of cranked Hartree-Fock states: Application to terminating bands in $A \sim 44$ nuclei:**
H. Zduniczuk, W. Satuła, J. Dobaczewski, M. Kosmowski,
Phys. Rev. C **76** (2007) 044304.
150. **Particle-Number Projection and the Density Functional Theory:**
J. Dobaczewski, M.V. Stoitsov, W. Nazarewicz, P.-G. Reinhard,
Phys. Rev. C **76** (2007) 054315.
151. **Spin-orbit and tensor mean-field effects on spin-orbit splitting including self-consistent core polarizations:**
M. Zalewski, W. Satuła, J. Dobaczewski, T.R. Werner,
Phys. Rev. C **77** (2008) 024316.
152. **Shell structure beyond the proton drip line studied via proton emission from deformed ^{141}Ho :**
M. Karny, K.P. Rykaczewski, R.K. Grzywacz, J.C. Batchelder, C.R. Bingham, C.T. Goodin, C.J. Gross, J.H. Hamilton, A. Korgul, W. Królas, S.N. Liddick, K. Li, K.H. Maier, C. Mazzocchi, A. Piechaczek, K. Rykaczewski, D. Shapira, D. Simpson, M.N. Tantawy, J.A. Winger, C.H. Yu, E.F. Zganjar, N. Nikolov, J. Dobaczewski, A.T. Kruppa, W. Nazarewicz, M.V. Stoitsov,
Phys. Lett. B **664** (2008) 52.
153. **Dependence of single-particle energies on coupling constants of the nuclear energy density functional:**
M. Kortelainen, J. Dobaczewski, K. Mizuyama, J. Toivanen,
Phys. Rev. C **77** (2008) 064307.
154. **Error analysis of nuclear mass fits:**
J. Toivanen, J. Dobaczewski, M. Kortelainen, K. Mizuyama,
Phys. Rev. C **78** (2008) 034306.
155. **Local nuclear energy density functional at next-to-next-to-next-to-leading order:**
B.G. Carlsson, J. Dobaczewski, M. Kortelainen,
Phys. Rev. C **78** (2008) 044326; **C81** (2010) 029904(E).
156. **Search for fingerprints of tetrahedral symmetry in ^{156}Gd :**
Q.T. Doan, D. Curien, O. Stézowski, J. Dudek, A. Gózdź, J. Piot, G. Duchêne, B. Gall, H. Molique, M. Richet, P. Medina, N. Redon, Ch. Schmitt, P. Jones, R. Julin, P. Peura, S. Ketelhut, M. Nyman, U. Jakobsson, A. Maj, K. Zuber, K. Mazurek, P. Bednarczyk, N. Schunck, J. Dobaczewski, A. Astier, I. Deloncle, D. Verney, G. de Angelis, J. Gerl,
Acta Phys. Pol. B **40** (2009) 725.
157. **Hartree-Fock-Bogoliubov theory of polarized Fermi systems:**
G. Bertsch, J. Dobaczewski, W. Nazarewicz, J. Pei,
Phys. Rev. A **79** (2009) 043602.
158. **Global nuclear structure aspects of tensor interaction:**
W. Satuła, M. Zalewski, J. Dobaczewski, P. Olbratowski, M. Rafalski, T.R. Werner, R.A. Wyss,
Int. Jour. Mod. Phys. E **18** (2009) 808.

159. **Isospin mixing of isospin-projected Slater determinants: formalism and preliminary applications:**
M. Rafalski, W. Satuła, J. Dobaczewski,
Int. Jour. Mod. Phys. E **18** (2009) 958.
160. **Nuclear structure of lowest ^{229}Th states and time-dependent fundamental constants:**
E. Litvinova, H. Feldmeier, J. Dobaczewski, V. Flambaum,
Phys. Rev. **C79** (2009) 064303.
161. **Microscopic description of complex nuclear decay: Multimodal fission:**
A. Staszczak, A. Baran, J. Dobaczewski, W. Nazarewicz,
Phys. Rev. **C80** (2009) 014309.
162. **Solution of the Skyrme-Hartree-Fock-Bogolyubov equations in the Cartesian deformed harmonic-oscillator basis. (VI) HFODD (v2.40h): a new version of the program:**
J. Dobaczewski, W. Satuła, B.G. Carlsson, J. Engel, P. Olbratowski, P. Powałowski, M. Sadziak, J. Sarich, N. Schunck, A. Staszczak, M.V. Stoitsov, M. Zalewski, H. Zdunčuk,
Comp. Phys. Commun. **180** (2009) 2361.
163. **Isospin mixing in nuclei within the nuclear density functional theory:**
W. Satuła, J. Dobaczewski, W. Nazarewicz, M. Rafalski,
Phys. Rev. Lett. **103** (2009) 012502.
164. **Lipkin translational-symmetry restoration in the mean-field and energy-density-functional methods:**
J. Dobaczewski,
J. Phys. G: Nucl. Part. Phys. **G36** (2009) 105105.
165. **Shell-structure fingerprints of tensor interaction:**
M. Zalewski, W. Satuła, J. Dobaczewski, P. Olbratowski, M. Rafalski, T.R. Werner, R.A. Wyss,
Eur. Phys. Journal **A42** (2009) 577.
166. **Self-consistent symmetries in the proton-neutron Hartree-Fock-Bogoliubov approach:**
S.G. Rohoziński, J. Dobaczewski, W. Nazarewicz,
Phys. Rev. **C81** (2010) 014313.
167. **One-quasiparticle States in the Nuclear Energy Density Functional Theory:**
N. Schunck, J. Dobaczewski, J. McDonnell, J. Moré, W. Nazarewicz, J. Sarich, M.V. Stoitsov,
Phys. Rev. **C81** (2010) 024316.
168. **Linear response strength functions with iterative Arnoldi diagonalization:**
J. Toivanen, B.G. Carlsson, J. Dobaczewski, K. Mizuyama, R.R. Rodríguez-Guzmán, P. Toivanen, P. Veselý,
Phys. Rev. **C81** (2010) 034312.
169. **New subshell closure at $N = 58$ emerging in neutron-rich nuclei beyond ^{78}Ni :**
J.A. Winger, K.P. Rykaczewski, C.J. Gross, R. Grzywacz, J.C. Batchelder, C. Goodin, J.H. Hamilton, S.V. Ilyushkin, A. Korgul, W. Królas, S.N. Liddick, C. Mazzocchi, S. Padgett, A. Piechaczek, M.M. Rajabali, D. Shapira, E.F. Zganjar, J. Dobaczewski,
Phys. Rev. **C81** (2010) 044303.
170. **Isospin-symmetry restoration within the nuclear density functional theory: formalism and applications:**
W. Satuła, J. Dobaczewski, W. Nazarewicz, M. Rafalski,
Phys. Rev. **C81** (2010) 054310.

171. **Spatial symmetries of the local densities:**
S.G. Rohoziński, J. Dobaczewski, W. Nazarewicz,
Int. Jour. Mod. Phys. E **19** (2010) 640.
172. **The Negele-Vautherin density matrix expansion applied to the Gogny force:**
J. Dobaczewski, B.G. Carlsson, M. Kortelainen,
J. Phys. G: Nucl. Part. Phys. **G37** (2010) 075106.
173. **Solution of self-consistent equations for the N³LO nuclear energy density functional in spherical symmetry. The program HOSPHE (v1.02):**
B.G. Carlsson, J. Dobaczewski, J. Toivanen, P. Veselý,
Comp. Phys. Commun. **181** (2010) 1641.
174. **Fully self-consistent calculations of nuclear Schiff moments:**
S. Ban, J. Dobaczewski, J. Engel, A. Shukla,
Phys. Rev. **C82** (2010) 015501.
175. **Convergence of density-matrix expansions for nuclear interactions:**
B.G. Carlsson, J. Dobaczewski,
Phys. Rev. Lett. **105** (2010) 122501.
176. **Isospin mixing in nuclei around $N \simeq Z$ and the superallowed β -decay:**
W. Satuła, J. Dobaczewski, W. Nazarewicz, M. Rafalski,
Acta Phys. Pol. **B42** (2011) 415.
177. **Isospin mixing in the vicinity of the $N = Z$ line:**
W. Satuła, J. Dobaczewski, W. Nazarewicz, M. Borucki, M. Rafalski,
Int. Jour. Mod. Phys. E **20** (2011) 244.
178. **Microscopic calculations of isospin-breaking corrections to superallowed beta decay:**
W. Satuła, J. Dobaczewski, W. Nazarewicz, M. Rafalski,
Phys. Rev. Lett. **106** (2011) 132502.
179. **Effective pseudopotential for energy density functionals with higher order derivatives:**
F. Raimondi, B.G. Carlsson, J. Dobaczewski,
Phys. Rev. **C83** (2011) 054311.
180. **Finite-range separable pairing interaction within the new N³LO DFT approach:**
P. Veselý, J. Dobaczewski, N. Michel, J. Toivanen,
J. Phys. Conf. Ser. **267** (2011) 012027.
181. **Current Developments in Nuclear Density Functional Methods:**
J. Dobaczewski,
J. Phys. Conf. Ser. **312** (2011) 092002.
182. **Quadrupole collective inertia in nuclear fission: cranking approximation:**
A. Baran, J.A. Sheikh, J. Dobaczewski, W. Nazarewicz, A. Staszczak,
Phys. Rev. **C84** (2011) 054321.
183. **Continuity equation and local gauge invariance for the N³LO nuclear energy density functionals:**
F. Raimondi, B.G. Carlsson, J. Dobaczewski, J. Toivanen,
Phys. Rev. **C84** (2011) 064303.

184. **Solution of the Skyrme-Hartree-Fock-Bogolyubov equations in the Cartesian deformed harmonic-oscillator basis. (VII) HFODD (v2.49t): a new version of the program:**
N. Schunck, J. Dobaczewski, J. McDonnell, W. Satuła, J.A. Sheikh, A. Staszczak, M. Stoitsov, P. Toivanen,
Comp. Phys. Commun. **183** (2012) 166.
185. **Self-consistent tilted-axis-cranking study of triaxial strongly deformed bands in ^{158}Er at ultrahigh spin:**
Yue Shi, J. Dobaczewski, S. Frauendorf, W. Nazarewicz, J. C. Pei, F. R. Xu, N. Nikolov,
Phys. Rev. Lett. **108** (2012) 092501.
186. **Precision mass measurements beyond ^{132}Sn : anomalous behavior of odd-even staggering of binding energies:**
J. Hakala, J. Dobaczewski, D. Gorelov, T. Eronen, A. Jokinen, A. Kankainen, V.S. Kolhinen, M. Kortelainen, I.D. Moore, H. Penttilä, S. Rinta-Antila, J. Rissanen, A. Saastamoinen, V. Sonnenschein, J. Äystö,
Phys. Rev. Lett. **109** (2012) 032501.
187. **Giant Monopole Resonances and nuclear incompressibilities studied for the zero-range and separable pairing interactions:**
P. Veselý, J. Toivanen, B.G. Carlsson, J. Dobaczewski, N. Michel, A. Pastore,
Phys. Rev. **C86** (2012) 024303.
188. **Effective theory for low-energy nuclear energy density functionals:**
J. Dobaczewski, K. Bennaceur, F. Raimondi,
J. Phys. G: Nucl. Part. Phys. **G39** (2012) 125103.
189. **Hartree-Fock-Bogoliubov solution of the pairing Hamiltonian in finite nuclei:**
J. Dobaczewski, W. Nazarewicz,
Chapter in the book: "50 Years of Nuclear BCS", edited by R. A. Broglia and V. Zelevinsky, (World Scientific, Singapore, 2013) p. 40.
190. **Isospin-breaking corrections to superallowed Fermi beta-decay in isospin- and angular-momentum-projected nuclear Density Functional Theory:**
W. Satuła, J. Dobaczewski, W. Nazarewicz, T.R. Werner,
Phys. Rev. **C86** (2012) 054316.
191. **Propagation of uncertainties in the Skyrme energy-density-functional model:**
Y. Gao, J. Dobaczewski, M. Kortelainen, J. Toivanen, D. Tarpanov,
Phys. Rev. **C87** (2013) 034324.
192. **Kerman-Onishi conditions in self-consistent tilted-axis-cranking mean-field calculations:**
Y. Shi, C.L. Zhang, J. Dobaczewski, W. Nazarewicz,
Phys. Rev. **C88** (2013) 034311.
193. **Energy-density-functional calculations including proton-neutron mixing:**
K. Sato, J. Dobaczewski, T. Nakatsukasa, W. Satuła,
Phys. Rev. **C88** (2013) 061301(R).
194. **Spontaneous fission lifetimes from the minimization of self-consistent collective action:**
Jhilam Sadhukhan, K. Mazurek, A. Baran, J. Dobaczewski, W. Nazarewicz, J.A. Sheikh,
Phys. Rev. **C88** (2013) 064314.

195. **Polarization corrections to single-particle energies studied within the energy-density-functional and QRPA approaches:**
D. Tarpanov, J. Toivanen, J. Dobaczewski, B.G. Carlsson,
Phys. Rev. C **89** (2014) 014307.
196. **Isospin mixing within the symmetry restored density functional theory and beyond:**
W. Satuła, J. Dobaczewski, M. Konieczka, W. Nazarewicz,
Acta Phys. Pol. B **45** (2014) 167.
197. **Charged-current neutrino and antineutrino scattering off ^{116}Cd described by Skyrme forces:**
W. Almosly, B.G. Carlsson, J. Dobaczewski, J. Suhonen, J. Toivanen, P. Veselý, E. Ydrefors,
Phys. Rev. C **89** (2014) 024308.
198. **New density-independent interactions for nuclear structure calculations:**
K. Bennaceur, J. Dobaczewski, F. Raimondi,
Eur. Phys. J. Web of Conf. **66** (2014) 02031.
199. **Rotational properties of nuclei around ^{254}No investigated using a spectroscopic-quality Skyrme energy density functional:**
Yue Shi, J. Dobaczewski, P.T. Greenlees,
Phys. Rev. C **89** (2014) 034309.
200. **Nonlocal energy density functionals for low-energy nuclear structure:**
F. Raimondi, K. Bennaceur, J. Dobaczewski,
J. Phys. G: Nucl. Part. Phys. **41** (2014) 055112.
201. **Error Estimates of Theoretical Models: a Guide:**
J. Dobaczewski, W. Nazarewicz, P.-G. Reinhard,
J. Phys. G: Nucl. Part. Phys. **41** (2014) 074001.
202. **Isospin-invariant Skyrme energy-density-functional approach with axial symmetry:**
J.A. Sheikh, N. Hinohara, J. Dobaczewski, T. Nakatsukasa, W. Nazarewicz, K. Sato,
Phys. Rev. C **89** (2014) 054317.
203. **Structure of Superheavy Nuclei Along Element 115 Decay Chains:**
Yue Shi, D.E. Ward, B.G. Carlsson, J. Dobaczewski, W. Nazarewicz, I. Ragnarsson, D. Rudolph,
Phys. Rev. C **90** (2014) 014308.
204. **Lipkin method of particle-number restoration to higher orders:**
X.B. Wang, J. Dobaczewski, M. Kortelainen, L.F. Yu, M.V. Stoitsov,
Phys. Rev. C **90** (2014) 014312.
205. **Simple regularization scheme for multi-reference density functional theories:**
W. Satuła, J. Dobaczewski,
Phys. Rev. C **90** (2014) 054303.
206. **Spectroscopic properties of nuclear Skyrme energy density functionals:**
D. Tarpanov, J. Dobaczewski, J. Toivanen, B.G. Carlsson,
Phys. Rev. Lett. **113** (2014) 252501.
207. **Pairing-induced speedup of nuclear spontaneous fission:**
J. Sadhukhan, J. Dobaczewski, W. Nazarewicz, J.A. Sheikh, A. Baran,
Phys. Rev. C **90** (2014) 061304(R).

208. **Multidimensional Skyrme-density-functional study of the spontaneous fission of ^{238}U :**
J. Sadhukhan, K. Mazurek, J. Dobaczewski, W. Nazarewicz, J.A. Sheikh, A. Baran,
Acta Phys. Pol. B **46** (2015) 575.
209. **Beta-decay studies in $N \simeq Z$ nuclei using no-core configuration-interaction model:**
W. Satuła, J. Dobaczewski, M. Konieczka,
JPS Conf. Proc. **6**, 020015 (2015).
210. **Mean-field calculation based on proton-neutron mixed energy density functionals:**
K. Sato, J. Dobaczewski, T. Nakatsukasa, W. Satuła,
JPS Conf. Proc. **6**, 020051 (2015).

II. Papers submitted for publication in periodicals and in press

1. **Properties of nuclei in the nobelium region studied within the covariant, Skyrme, and Gogny energy density functionals:**
J. Dobaczewski, A.V. Afanasjev, M. Bender, L.M. Robledo, and Yue Shi,
Nuclear Physics A, in press, *arXiv:1504.03245*.
2. **Ab initio derivation of model energy density functionals:**
J. Dobaczewski,
submitted to Physical Review Letters, *arXiv:1507.00697*.

III. Popularized papers for general public

1. **O obrotach ciał niewielkich (I):**
J. Dobaczewski, W. Nazarewicz,
Delta **170** (1988) 13 (in Polish).
2. **O obrotach ciał niewielkich (II):**
J. Dobaczewski, W. Nazarewicz,
Delta **172** (1988) 10 (in Polish).
3. **Prawdopodobieństwo rozpadu promieniotwórczego:**
J. Dobaczewski,
Delta **307** (1999) 2 (in Polish).
4. **The atomic nucleus as a laboratory:**
H. Białkowska, Z. Sujkowski, J. Dobaczewski,
CERN Courier **44** (2004) 16.

IV. Papers published as preprints or e-prints

1. **Microscopic dynamic calculations of collective states in xenon and barium isotopes II:**
S.G. Rohoziński, J. Dobaczewski, B. Nerlo-Pomorska, K. Pomorski, J. Srebrny,
preprint IFT/77/8.

2. **Real coherent states for fermion systems:**

J. Dobaczewski, S.K. Koonin,
CALTECH preprint (1983), MAP-35.

3. **Wybrane zagadnienia teorii jądra atomowego (in Polish):**

- J. Dobaczewski,
- *Part I - preprint IFT/16/85,*
 - *Part II - preprint IFT/2/86,*
 - *Part III - preprint IFT/18/86,*
 - *Part IV - preprint IFT/19/86,*
 - *Part V - preprint IFT/32/87.*

Warsaw University Preprints.

4. **Excited superdeformed bands in ^{148}Gd : Band crossing and identical bands:**

G. de France, D. Prévost, J.C. Lisle, H.R. Andrews, B.C. Ball, C.W. Beausang, F.A. Beck, Th. Byrski, D. Curien, G. Duchêne, Ch. Finck, S. Flibotte, G. Gall, B. Haas, G. Hackman, V. Janzen, B. Khararaja, J.C. Merdinger, S.M. Mullins, S. Pilotte, D.C. Radford, C. Rigollet, H. Savajols, O. Stezowski, Ch. Theisen, P.J. Twin, J.P. Vivien, J.C. Waddington, D. Ward, L. Wei, K. Zuber, J. Dobaczewski, J. Dudek, W.D. Luo, A. Bouguettoucha, W. Nazarewicz,
preprint CRN 95-32.

5. **HFODD (v2.08k): User's Guide:**

J. Dobaczewski, J. Dudek, P. Olbratowski,
on-line-only publication: nucl-th/0501008.

6. **HFODD (v2.40h): User's Guide:**

J. Dobaczewski, B.G. Carlsson, J. Dudek, J. Engel, P. Olbratowski P. Powalowski, M. Sadziak, J. Sarich, W. Satuła, N. Schunck, A. Staszczak, M. Stoitsov, M. Zalewski, H. Zduńczuk,
on-line-only publication: arXiv:0909.3626.

V. Conference invited talks

1. **Nuclear deformation: A proton-neutron effect?:**

J. Dobaczewski,
Contemporary Topics in Nuclear structure, Proceedings of the International Conference in Cocoyoc, México, R.F. Casten, A. Frank, M. Moshinsky, S. Pittel (World Scientific, Singapore, 1988), p. 227.

2. **Hartree-Fock description with quadrupole correlations of superdeformed states in lead:**

J. Dobaczewski, P. Bonche, H. Flocard, P.-H. Heenen, S.J. Krieger, J. Meyer, M.S. Weiss,
Wetherill Symposium, Philadelphia, May 1991, unpublished.

3. **Hartree-Fock description of superdeformed states:**

J. Dobaczewski, P. Bonche, H. Flocard, P.-H. Heenen, S.J. Krieger, J. Meyer, M.S. Weiss,
Frontier Topics in Nuclear and Astrophysics—Graduate Lectures, Proceedings of the 22nd Mazurian Lakes Summer School on Nuclear Physics, held in Piaski, Poland, eds. Z. Sujkowski, G. Szeftlińska (Institute of Physics Publishing, Bristol, 1992), p. 109.

4. **Coherent states and boson-fermion mapping:**
J. Dobaczewski, J. Dobeš, H.B. Geyer, F.J.W. Hahne, P. Navrátil, F.G. Scholtz,
Proc. of the Int. Symp. on Coherent States, Past, Present, and Future, eds. D.H. Feng, J.R. Klauder,
M.R. Strayer, (World Scientific, Singapore, 1994) p. 119.
5. **Nuclear shell structure at particle drip lines:**
J. Dobaczewski,
International workshop on high spins and novel deformations, ECT, Trento, 29 November – 18 December 1993, unpublished.*
6. **Nuclear Structure at the Proton and Neutron Drip Lines:**
J. Dobaczewski,
Crystal City Meeting of the American Physical Society, 18-22 April 1994, Bull. Am. Phys. Soc. 39 (1994) 1243.
7. **Closed shells at drip-line nuclei:**
J. Dobaczewski, W. Nazarewicz, T.R. Werner,
SELMA 94, Int. Conf. on New nuclear structure phenomena in the vicinity of closed shells, 30 August – 3 September 1994, reference I.53.
8. **Pairing correlations at drip lines:**
J. Dobaczewski,
Topics in Nuclear Physics and Astrophysics, Copenhagen, 12-13 September 1994, unpublished.
9. **Nuclear structure aspects of exotic nuclei:**
J. Dobaczewski,
Int. Conf. on Reaction Studies with Exotic Nuclei from SPIRAL, GANIL, Caen, 30-31 January 1995, unpublished.
10. **Mean-field description of drip-line nuclei:**
J. Dobaczewski,
1995 Nuclear Chemistry Gordon Research Conference, New London, 18-23 June 1995, unpublished.
11. **Pairing correlations in drip-line nuclei:**
J. Dobaczewski,
Theory Workshop on Pairing Forces, Argonne, 26-30 June 1995, unpublished.
12. **Time-odd components in the rotating mean field and identical bands:**
J. Dobaczewski, J. Dudek,
High angular momentum phenomena, Special Workshop in honour of Zdzisław Szymański, Piaski, 23-26 August 1995, reference I.65.
13. **Jądra dalekie od linii stabilności beta: nowe wino w starej beczce (in Polish):**
J. Dobaczewski,
Symposium IFT UW: Fizyka Teoretyczna Lat 90-tych, Warsaw, 14-16 December 1995, p. 97.
14. **Pairing effects in nuclei near the neutron drip line:**
J. Dobaczewski, W. Nazarewicz, T.R. Werner,
Proc. of the Int. Hirschegg Workshop XXIV, Extremes of Nuclear Structure, eds. H. Feldmeier,
J. Knoll, W. Nörnberg (GSI, Darmstadt, 1996) p. 214.
15. **Cranking Hartree-Fock description of rotating superdeformed nuclei:**
J. Dobaczewski,
NORDITA Study Weekend on EUROBALL Physic, Copenhagen, May 9-11, 1996, unpublished.

16. **Hartree-Fock approach:**
J. Dobaczewski,
Contemporary Shell Model Workshop, Philadelphia, April 29-30, 1996, unpublished.
17. **(i) Shell structure far from stability, (ii) Shell effects in dripline nuclei, (iii) Pairing in the continuum studied via the spectral amplitudes, and (iv) Skyrme parametrizations from finite-range forces:**
J. Dobaczewski,
International Workshop on Structure of Nuclei far from β -Stability, Trento, May 20-31, 1996, unpublished.
18. **Properties of Drip-Line Nuclei Studied With Self-Consistent Mean-Field Methods:**
J. Dobaczewski,
Conference on Nuclear Physics Near the Drip Lines, Gull Lake, 21-24 August, 1996, unpublished.
19. **Rotational Bands in Superdeformed Nuclei:**
J. Dobaczewski,
XXXI Zakopane School of Physics, Trends in Nuclear Physics, 3-11 September, 1996, unpublished.
20. **Extrapolation of nuclear masses:**
J. Dobaczewski,
Workshop on The physics around the doubly-magic ^{78}Ni nucleus, Leuven, 4-5 November, 1996, unpublished.
21. **The properties of neutron dripline nuclei:**
J. Dobaczewski,
1997 Nuclear Chemistry Gordon Research Conference, New London, 15-20 June 1997, unpublished.
22. **Nuclear structure close to the n-drip line:**
J. Dobaczewski,
Workshop on the Science for an Advanced ISOL Facility, Columbus/Ohio, July 30 – August 1, 1997, unpublished.
23. **Structure of Nuclei far from stability:**
J. Dobaczewski,
Symposium on New Spectroscopy and Nuclear Structure 1997, Copenhagen, September 16-20, 1997, unpublished.
24. **Status of RB Science: What has been done and Where is it going:**
J. Dobaczewski,
*1997 Fall Meeting of the Division of Nuclear Physics of the American Physical Society, Whistler, Canada, October 5-8, 1997, Bull. Am. Phys. Soc. **42** (1997) 1620.*
25. **Self-consistent methods in nuclear structure physics:**
J. Dobaczewski,
XVII RCNP International Symposium on Innovative Computational Methods in Nuclear Many-Body Problems, Osaka, Japan, November 10-15, 1997, eds. H. Horiuchi et al. (World Scientific, Singapore, 1998), p. 323.
26. **Pairing and mean-field properties far from stability:**
J. Dobaczewski,
Workshop on Mean-Field Methods in Low Energy Nuclear Structure, Trento, Italy, March 23 – April 4, 1998, unpublished.

27. **Shell structure far off stability:**
J. Dobaczewski,
33rd Holzhau Spring Meeting 1998, Holzhau, Germany, March 30 – April 3, 1998, unpublished.
28. **Structure of nuclei at extreme values of the isospin:**
J. Dobaczewski,
International Conference on Nuclear physics close to the barrier, Warsaw, 30 June – 4 July, 1998, reference I.93.
29. **Deformations of nuclei far from stability:**
J. Dobaczewski,
Theory Institute on Nuclear Structure, Argonne, USA, 3-7 August 1998, unpublished.
30. **Superdeformation: Perspectives and prospects:**
J. Dobaczewski,
Int. Conference Nuclear Structure '98, Gatlinburg, USA, 10-15 August 1998, AIP Conference Proceedings 481, ed. C. Baktash (American Institute of Physics, New York, 1999), p. 315.
31. **Continuum effects for the mean-field and pairing properties of weakly bound nuclei:**
J. Dobaczewski,
Mini-meeting: Shell Model Related Problems, NORDITA, Copenhagen, 17-19 December 1998, unpublished.
32. **Mean-field description of nuclei far from stability:**
J. Dobaczewski,
The nucleus, new physics for the new millenium, National Accelerator Centre, Faure, South Africa, 18-22 January 1999, unpublished.
33. **Spherical and deformed nuclei far from stability:**
J. Dobaczewski,
From Rapid Chemistry to Rapid Nucleosynthesis, ACS Award for the Nuclear Chemistry in honor of Karl-Ludwig Kratz, Anaheim, USA, 22-26 March 1999, unpublished.
34. **Mean-field extrapolations of nuclear structure to nuclei near drip lines:**
J. Dobaczewski,
ECT Workshop on Advances in shell-model studies in nuclei far from stability, Trento, Italy, June 14-25, 1999, unpublished.*
35. **Deformation of nuclei near drip lines:**
J. Dobaczewski,
Joint study weekend HALO99, Copenhagen, May 28-30, 1999, unpublished.
36. **What can we learn from a study of exotic nuclei near the drip line?:**
J. Dobaczewski,
First Euroconference on Atomic Physics at Accelerators (APAC 99), Mainz, Germany, 19-24 September, 1999, unpublished.
37. **Recent developments in mean-field studies of exotic nuclei:**
J. Dobaczewski,
XIII Int. School on Nuclear Physics, Neutron Physics and Nuclear Energy, Varna, Bulgaria, September 27 – October 3, 1999, unpublished.
38. **High-spin and high-isospin phenomena in present-day nuclear structure theoretical studies:**

- J. Dobaczewski,
Nuclear Physics in Belgium and Europe, Ittre, Belgium, February 21-22, 2000, unpublished.
39. **Superdeformation in $A=30$ and $A=60$ nuclei:**
J. Dobaczewski,
Structure of the Nucleus at the Dawn of the Century, Bologna, Italy, May 29 – June 3, 2000.
40. **Structure of light $N \sim Z$ superdeformed nuclei:**
J. Dobaczewski,
Selected Topics on $N=Z$ Nuclei, Lund, Sweden, June 6-10, 2000, eds. D. Rudolph, M. Hellström (Lund, Bloms i Lund, 2000) p. 182.
41. **Mean-field description of exotic nuclei far off stability:**
J. Dobaczewski,
TMR User Meeting, Cologne, Germany, June 13-15, 2000, unpublished.
42. **Nuclear structure issues at RIA:**
J. Dobaczewski,
Town Meeting on Nuclear Structure and Astrophysics, Oakland, USA, November 9-12, 2000, unpublished.
43. **Neutron and proton densities and deformations in drip-line nuclei:**
J. Dobaczewski,
ISOL'01, Oak Ridge, USA, March 11-14, 2001, to be published electronically.
44. **Nuclear structure aspects in nuclear astrophysics:**
J. Dobaczewski,
International Symposium on Nuclear Astrophysics, GSI Darmstadt, Germany, May 3-4, 2001, unpublished.
45. **Contact pairing interaction for the Hartree-Fock-Bogoliubov calculations:**
J. Dobaczewski, W. Nazarewicz, M.V. Stoitsov,
NATO Advanced Research Workshop The Nuclear Many-Body Problem 2001, Brijuni National Park, Pula, Croatia, June 2-5, 2001, eds. W. Nazarewicz and D. Vretenar (Kluwer, Dordrecht, 2002), p. 181.
46. **Rotational states in light nuclei:**
J. Dobaczewski,
IREs Workshop on the Future of Nuclear Structure and Gamma Spectroscopy with Stable Beams, Strasbourg, France, June 7-8, 2001, unpublished.
47. **Hartree-Fock description of rotational bands:**
J. Dobaczewski,
Strasbourg theory workshop, Strasbourg, France, June 5-9, 2001, unpublished.
48. **Selected Topics in Nuclear Structure far from Stability:**
J. Dobaczewski,
Twentieth International Workshop on Nuclear Theory, Rila Mountains, Bulgaria, June 10-16, 2001, unpublished.
49. **Nuclear ground-state properties from mean-field calculation:**
J. Dobaczewski, W. Nazarewicz, M.V. Stoitsov,
3rd International Conference on Exotic Nuclei and Atomic Masses, Hämeenlinna, Finland, July 2-7, 2001, reference I.114.

50. **Pairing interaction in heavy nuclei:**
J. Dobaczewski,
ECT Workshop on Very Heavy Nuclear Systems, Trento, Italy, July 9-14, 2001, unpublished.*
51. **Theoretical developments in heavy nuclei:**
J. Dobaczewski,
International Nuclear Physics Conference, Berkeley, USA, 30 July - 3 August, 2001, AIP Conference Proceedings Volume 610, eds. E. Norman, L. Schroeder, G. Wozniak (American Institute of Physics, New York, 2002) p. 203.
52. **Self-consistent theoretical methods for weakly bound nuclei:**
J. Dobaczewski,
International Summer School on Subatomic Physics, 2nd Course: Nuclear structure and reaction in astrophysics, Beijing, China, 21-25 August, 2001, unpublished.
53. **Shell structure of nuclei at the drip lines:**
J. Dobaczewski,
XIIIth Colloque GANIL, Belgodère, France, 17-22 September, 2001, unpublished.
54. **Mean-field and pairing properties of exotic nuclei: exploring the nuclear landscape:**
J. Dobaczewski, W. Nazarewicz,
Yukawa International Seminar 2001 (YKIS01) on Physics of Unstable Nuclei, Kyoto, Japan, 5-10 November, 2001, reference I.115.
55. **Pairing and continuum in weakly bound nuclei:**
J. Dobaczewski,
ECT Workshop on Continuum Aspects of the Nuclear Shell Model, Trento, Italy, June 3-8, 2002, unpublished.*
56. **Interactions, symmetry breaking, and effective fields from quarks to nuclei (A primer in nuclear theory):**
J. Dobaczewski,
Ecole Internationale Joliot-Curie de Physique Nucleaire, 21 session, Maubuisson, France, September 8-14, 2002, in Trends in Field Theory Research, ed. O. Kovras (Nova Science Publishers, New York, 2005) p. 157, nucl-th/0301069.
57. **Interactions and symmetry breaking in nuclear systems:**
J. Dobaczewski,
Proceedings of the 3rd International Balkan School of Nuclear Physics, Nuclear Structure – Nuclear Astrophysics, Thessaloniki, Greece, September 18-24, 2002, ed. G.A. Lalazissis (Art of Text, Thessaloniki, 2003) p. 261.
58. **Exotic nuclei and energy density functionals:**
J. Dobaczewski,
Theory Symposium on Rare Isotope Accelerator Science, Argonne, USA, April 28 - May 2, 2003, unpublished.
59. **Local Density Approximation for proton-neutron pairing correlations:**
J. Dobaczewski,
Iso-Pairing Workshop, Stockholm, Sweden, May 18-20, 2003, unpublished.
60. **On the local density approximation:**
J. Dobaczewski,
ECT Workshop on Recent Advances in the Nuclear Shell Model, Trento, Italy, June 29 – July 12, 2003, unpublished.*

61. **Microscopic origins of the Local Energy-Density Functionals in nuclei:**
J. Dobaczewski,
ECT Workshop on Density Functional Theory in Nuclear Structure, Trento, Italy, July 21-25, 2003, unpublished.*
62. **Atomic nucleus as a laboratory for fundamental processes:**
J. Dobaczewski,
Concluding remarks presented at the XXVIII Mazurian Lakes Conference on Physics: Atomic Nucleus as a Laboratory for Fundamental Processes, Krzyże, Poland, August 31 – September 7, 2003, reference I.122.
63. **Mean-field studies of exotic nuclei:**
J. Dobaczewski,
10th Marie and Pierre Curie Workshop on Theoretical Nuclear Physics, Kazimierz Dolny, Poland, September 24-28, 2003, unpublished.
64. **Nuclear masses and gross properties:**
J. Dobaczewski,
First Argonne/MSU/JINA/INT RIA Workshop: The r-process: the astrophysical origin of the heavy elements and related Rare Isotope Accelerator Physics, Seattle, USA, January 8-10, 2004, unpublished.
65. **Skyrme-HFB deformed nuclear mass table:**
J. Dobaczewski, M.V. Stoitsov, W. Nazarewicz,
International Conference on NUCLEAR PHYSICS, LARGE and SMALL, Microscopic Studies of Collective Phenomena, Hotel Hacienda Cocoyoc, Morelos, México, April 19-22, 2004, AIP Conference Proceedings Volume 726, ed. R. Bijker, R.F. Casten, A. Frank (American Institute of Physics, New York, 2004) p. 51.
66. **Nuclear structure theory:**
J. Dobaczewski,
RIA 2004 Summer School, Argonne National Laboratory, Argonne, USA, August 8-14, 2004, unpublished.
67. **Collective properties at the Extremes:**
J. Dobaczewski,
*2004 Fall Meeting of the Division of Nuclear Physics of the American Physical Society, Chicago, USA, October 27-30, 2004, Bull. Am. Phys. Soc. **49** (2004) 36.*
68. **Effective fields from quarks to exotic nuclei:**
J. Dobaczewski,
Série de Cours at the Ecole Doctorale de Physique, Chimie Physique et Mathématiques, Strasbourg, France, June 20-24, 2005, unpublished.
69. **Self-consistent description of nuclear rotations: present status and perspectives:**
J. Dobaczewski,
Symposium en l'honneur de Paul Bonche, Saclay, France, June 27, 2005, unpublished.
70. **Structure of exotic nuclei:**
J. Dobaczewski,
XXIX Mazurian Lakes Conference on Physics, Nuclear Physics and the Fundamental Processes, Piaski, Poland, August 30 – September 6, 2005, unpublished.
71. **Single-particle properties of nuclei far from stability:**
J. Dobaczewski,
First EURISOL Design Study TOWN MEETING, Caen, France, November 28-29, 2005, unpublished.

72. **Nuclear Structure: Theoretical Models:**
J. Dobaczewski,
3rd VISTARS Workshop on Nuclear Astrophysics, Rußbach, Austria, March 11-19, 2006, unpublished.
73. **Tensor interactions in mean-field approaches:**
J. Dobaczewski,
Proceedings of the Third ANL/MSU/JINA/INT RIA Workshop: Opportunities with Exotic Beams, Argonne, USA, April 4-7, 2006, eds. T. Duguet, H. Esbensen, K.M. Nollet, and C.D. Roberts, (World Scientific, Singapore, 2007), p. 152; nucl-th/0604043.
74. **Nuclear* theory in Poland:**
J. Dobaczewski,
NUPECC 56th meeting, Kraków, Poland, June 9-10, 2006, unpublished.
75. **Shell structure of neutron-rich nuclei: a theoretical perspective:**
J. Dobaczewski,
Nuclear Structure '06, Conference on nuclei at the limits, Oak Ridge, USA, July 24-28, 2006, unpublished.
76. **Theoretical description of exotic nuclei:**
J. Dobaczewski,
Zakopane 2006 Conference: Trends in Nuclear Physics Zakopane, Poland, September 4-10, 2006, unpublished.
77. **Single-particle structure of nuclei far from stability:**
J. Dobaczewski,
Annual NuSTAR Meeting, GSI, Darmstadt Germany, March 21-23, 2007, unpublished.
78. **Ground-state properties:**
J. Dobaczewski,
EURONS Laser and Trap collaboration meeting, Saariselkä, Finland, April 11-15, 2007, unpublished.
79. **Towards a universal density functional:**
J. Dobaczewski,
Experiment – Theory Intersections in Modern Nuclear Structure, ECT, Trento, Italy, April 23-27, 2007, unpublished.*
80. **Modern mean-field and energy-density-functional theories in nuclear physics:**
J. Dobaczewski,
Theoretical nuclear physics school “Exotic Nuclei: New Challenges”, Les Houches, France, May 7-18, 2007, unpublished.
81. **Theory of drip-line nuclei: general overview:**
J. Dobaczewski,
Nordic Nuclear Meeting 2007, Gilleleje, Denmark, August 12-17, 2007, unpublished.
82. **Pathologies of current multi-reference EDF calculations:**
J. Dobaczewski,
Atelier de l'Espace de Structure Nucléaire Théorique, CEA/SPhN, Ormes des Merisiers, France, November 6-7, 2007, unpublished.
83. **Spectroscopic-quality energy density functional and how to get there:**
J. Dobaczewski,
DFT-UNEDF Workshop, Joint Institute for Heavy Ion Research, ORNL, Oak Ridge, USA, January 22, 2008, unpublished.

84. **Density functional theory of nuclei:**
J. Dobaczewski,
Present and Future Exotics in Nuclear Physics, Copenhagen, Denmark, February 28-29, 2008, unpublished.
85. **Extensions of nuclear energy density functionals beyond the current standard form:**
J. Dobaczewski,
Carnegie 2008 Conference: Nuclear Structure at the Extremes, Paisley, Scotland, May 8-10, 2008, unpublished.
86. **From nuclei to stars - a short history of nuclear binding:**
J. Dobaczewski,
NITheP Inauguration Lectures, Wallenberg Research Centre, STIAS, Marais Street, Stellenbosch, South Africa, May 13, 2008, unpublished.
87. **New-generation energy density functionals:**
J. Dobaczewski,
UNEDF Annual Workshop, Pack Forest, USA, June 23-26, 2008, unpublished.
88. **Benchmarking single particle states:**
J. Dobaczewski,
UNEDF Annual Workshop, Pack Forest, USA, June 23-26, 2008, unpublished.
89. **Energy Density Functional Methods in Nuclear Physics:**
J. Dobaczewski,
The 18th Jyväskylä Summer School, Finland, August 18-22, 2008, unpublished.
90. **Modern mean-field approaches in nuclear structure:**
J. Dobaczewski,
15th Euroschool on Exotic Beams, Piaski, Poland, September 1-7, 2008, unpublished.
91. **Nuclear density functional theory (recent applications & extensions):**
J. Dobaczewski,
The Fifth International Conference on Exotic Nuclei and Atomic Masses (ENAM), Ryn, Poland, September 7-13, 2008, unpublished.
92. **Energy density functional methods in nuclear physics:**
J. Dobaczewski,
20th Chris Engelbrecht Summer School in Theoretical Physics, STIAS, Stellenbosch, South Africa, January 19-28, 2009, unpublished.
93. **Density functional methods in nuclear physics:**
J. Dobaczewski,
ECT Doctoral Training Programme 2009 Strongly Correlated Quantum Systems, Trento, Italy, March 29 - June 19, 2009, unpublished.*
94. **New-generation functionals:**
J. Dobaczewski,
UNEDF Annual Workshop, Pack Forest, USA, June 22-25, 2009, unpublished.
95. **Theoretical description of exotic nuclei:**
J. Dobaczewski,
XXXI Mazurian Lakes Conference on Physics Nuclear Physics and the Road to FAIR, Piaski, Poland, August 30 - September 6, 2009, unpublished.

96. **New ideas in the nuclear energy density functional approach:**
J. Dobaczewski,
The first EURISOL UG topical meeting: The formation and structure of r-process nuclei between $N = 50$ and 82 (including ^{78}Ni and ^{132}Sn areas) Catania, Italy, December 9-11, 2009, unpublished.
97. **RPA strength functions in nuclei with iterative Arnoldi diagonalization:**
J. Dobaczewski,
Multidisciplinary Workshop on RPA, Paris, France, January 26-29, 2010, unpublished.
98. **New ideas and new results in the nuclear energy density functional approach:**
J. Dobaczewski,
SPIRAL2 Week 2010, Caen, France, January 25-28, 2010, unpublished.
99. **Extended energy density functionals and ground-state correlations in nuclei:**
J. Dobaczewski,
European Radioactive Ion Beam Conference, Lamoura, France, June 6-11, 2010, unpublished.
100. **New-generation Functionals:**
J. Dobaczewski,
UNEDF Annual Collaboration Meeting, Michigan State University, USA, June 21-25, 2010, unpublished.
101. **Current Developments in Nuclear Density Functional Methods:**
J. Dobaczewski,
The 24th International Nuclear Physics Conference (INPC2010), Vancouver, Canada, July 4-9, 2010, reference I.181.
102. **Extended energy density functionals and ground-state correlations in nuclei:**
J. Dobaczewski,
11th Symposium on Nuclei in the Cosmos, Heidelberg, Germany, July 19-23, 2010, unpublished.
103. **Density functional theory and energy density functionals in nuclear physics:**
J. Dobaczewski,
The 9th CNS-EFES International Summer School, Tokyo, Japan, August 18-24, 2010, unpublished.
104. **Theoretical description of heavy nuclei for the calculation of nuclear Schiff moments:**
J. Dobaczewski,
Workshop on Violations of discrete symmetries in atoms and nuclei, ECT Trento, Italy, November 15-19, 2010, unpublished.*
105. **Why, How, and What for the Energy Density Functionals in Nuclei:**
J. Dobaczewski,
Nuclear Physics Workshop at the NITheP, Stellenbosch, South Africa, May 16-27, 2011, unpublished.
106. **Phenomenological $N^3\text{LO}$ functionals for nuclei:**
J. Dobaczewski,
UNEDF Annual Collaboration Meeting, Michigan State University, USA, June 20-24, 2011, unpublished.
107. **Atomic masses and the quest for the spectroscopic-quality energy density functionals:**
J. Dobaczewski,
Workshop on Nuclear structure seen through ground-state properties of exotic nuclei, ECT Trento, Italy, October 17-21, 2011, unpublished.*

108. **Iterative methods to solve the RPA and QRPA equations:**
J. Dobaczewski,
Workshop on The nuclear dipole polarizability and its impact on nuclear structure and astrophysics, ECT Trento, Italy, June 18-22, 2012, unpublished.*
109. **New nonrelativistic energy density functionals for low-energy nuclear phenomena:**
J. Dobaczewski,
Nuclear Structure and Dynamics, Opatija, Croatia, July 9-13, 2012, unpublished.
110. **Effective theory for low-energy nuclear energy density functionals:**
J. Dobaczewski,
Zakopane Conference on Nuclear Physics, Zakopane, Poland, August 27 - September 2, 2012, unpublished.
111. **Higher-order derivative terms in the low-energy nuclear energy density functionals:**
J. Dobaczewski,
Proceedings of the Fifth International Conference on Fission and Properties of Neutron-Rich Nuclei, Sanibel Island, USA, November 4-10, 2012, unpublished.
112. **Energy density functionals for low-energy nuclear phenomena:**
J. Dobaczewski,
XXXIII Mazurian Lakes Conference on Physics: Frontiers in Nuclear Physics, Piaski, Poland, September 1-7, 2013, unpublished.
113. **Adiabatic TDDFT + discussion:**
J. Dobaczewski,
INT Program INT-13-3, Quantitative Large Amplitude Shape Dynamics: fission and heavy ion fusion, Seattle, USA, September 23 - November 15, 2013, unpublished.
114. **Teorie jądrowego funkcyjonału gęstości:**
J. Dobaczewski,
Symposium Instytutu Fizyki Teoretycznej, Warsaw, Poland, December 13, 2013, unpublished.
115. **Quo vadis EDF?:**
J. Dobaczewski,
Workshop on Future Directions in the Physics of Nuclei at Low Energies, ECT Trento, Italy, May 21-23, 2014, unpublished.*
116. **Novel energy density functionals for low-energy nuclear phenomena:**
J. Dobaczewski,
International Conference on Advances in Radioactive Isotope Science, ARIS2014, Tokyo, Japan, June 1-6, 2014, unpublished.
117. **Theoretical challenges:**
J. Dobaczewski,
Symposium: The first 20 years at HIL, Heavy Ion Laboratory, Warsaw, Poland, June 10-11, 2014, unpublished.
118. **Energy-density-functional calculations including proton-neutron mixing:**
J. Dobaczewski,
FIDIPRO-HIP miniworkshop on Nuclear isospin properties, Helsinki, Finland, 16-18 October, 2014, unpublished.

119. **Isospin Violation & Nuclear Decays:**
J. Dobaczewski,
Workshop on Fundamental Symmetry Tests with Rare Isotopes, Amherst, USA, 23-25 October, 2014, unpublished.
120. **Nuclear Density Functional Theory and beyond:**
J. Dobaczewski,
Workshop on Nuclear structure studies using empirical and theoretical ground and excited state properties, Istanbul, Turkey, 18-20 November, 2014, unpublished.
121. **New family of finite-range pseudopotential-based energy density functionals:**
J. Dobaczewski,
ESNET workshop on New developments in nuclear energy density functionals, Saclay, France, 24-28 November, 2014, unpublished.
122. **Non-local energy density functional for multi-reference calculation:**
J. Dobaczewski,
FUSTIPEN workshop on New Directions for Nuclear Structure and Reaction Theories, GANIL, Caen, France, March 16-20, 2015, unpublished.
123. **New ideas for building nuclear energy density functionals:**
J. Dobaczewski,
Workshop on Nuclear Physics with Lasers and Gamma-ray Beams: Towards ELI-NP, University of York, York, United Kingdom, July 3, 2015, unpublished.
124. **New developments in nuclear DFT:**
J. Dobaczewski,
Conference on Reflections on the atomic nucleus, University of Liverpool, Liverpool, United Kingdom, July 28-30, 2015, unpublished.
125. **Nuclear Structure:**
J. Dobaczewski,
18th STFC UK Postgraduate Nuclear Physics Summer School, University of Lancaster, Lancaster, United Kingdom, 25-27 August, 2015, unpublished.
126. **Coupling of single-particle motion to nuclear vibrations:**
J. Dobaczewski,
The 5th International Conference on Collective Motion in Nuclei under Extreme Conditions (COMEX5), Kraków, Poland, September 14-18, 2015, unpublished.

VI. Conference communications

1. **A unification of boson expansion theories:**
J. Dobaczewski,
Fourth Topical School: Interacting Bosons in Nuclei, Granada, 1981, unpublished.
2. **The cranking approach to the collective pairing Hamiltonian for asymmetric systems:**
J. Dobaczewski, S.G. Rohoziński,
Proc. of International Research Symposium Symmetries and Nuclear Structure, Dubrovnik 1986, eds. R.A. Meyer, V. Paar (Harwood,1987) p. 508.

3. **The $g_{9/2} \Rightarrow g_{7/2}$ Gamow-Teller beta decay of even nuclei near ^{100}Sn :**
J. Dobaczewski, W. Nazarewicz, A. Plochocki, K. Rykaczewski, J. Żylicz,
Proc. of the Int. Symp. on Weak and Electromagnetic Interactions in Nuclei, ed. H.V. Klapdor
(Springer, Berlin, 1986) p. 248.
4. **Gamow-Teller beta decay of even nuclei near ^{100}Sn :**
K. Rykaczewski, R. Barden, J. Dobaczewski, H. Gabelmann, I.S. Grant, Ł. Kalinowski, R. Kirchner,
O. Klepper, W. Nazarewicz, G. Nyman, A. Plochocki, G.-E. Rathke, E. Roeckl, D. Schardt, J. Żylicz,
AIP Conference Proceedings, AMCO-1987, ed. I.S. Towner (American Institute of Physics, New York,
1988) p. 656.
5. **Coherent particle and quasiparticle pairs determined from the Hartree-Fock approach:**
J. Dobaczewski, J. Skalski,
Selected Topics in Nuclear Structure, Proceedings of the XXII Zakopane School on Physics, R. Broda,
Z. Stachura (Instytut Fizyki Jądrowej, Kraków, 1987), p. 375.
6. **Proton-neutron interaction and nuclear deformation:**
J. Dobaczewski, W. Nazarewicz, J. Skalski, T.R. Werner,
Proceedings of the International Conference on High Spin, Nuclear Structure and Novel Nuclear Shapes,
eds. I. Ahmad, R. Chasman, R. Janssens, T.L. Khoo, p. 302.
7. **The role of n-p interaction in developping the nuclear deformation:**
J. Dobaczewski, W. Nazarewicz, J. Skalski, T.R. Werner,
Selected Topics in Nuclear Structure, Proceedings of the XXIII Zakopane School on Physics, eds.
R. Broda, Z. Stachura, (Instytut Fizyki Jądrowej, Kraków, 1987), p. 327.
8. **Nuclear Deformation - a Proton-Neutron Effect?:**
J. Dobaczewski, W. Nazarewicz, J. Skalski, T.R. Werner,
Proceedings of the 2nd International Spring Seminar on Nuclear Physics, Capri, May 1988, unpub-
lished.
9. **Deformed nuclear state as a quasiparticle-pair condensate:**
J. Dobaczewski, J. Skalski,
Proceedings of the 2nd International Spring Seminar on Nuclear Physics, ed. A. Covello (World
Scientific, Singapore, 1988) p. 561.
10. **Densité de charge du Plomb: champ moyen et corrélations de Lipkin-Nogami:**
L. Bennour, P.-H. Heenen, P. Bonche, J. Dobaczewski, H. Flocard,
10^e Session d'Etudes Biennale de Physique Nucléaire, Aussois, 1989 ed. J. Meyer, p. S.14.1.
11. **Single-particle coherent excitation model of collective quadrupole states:**
J. Dobaczewski,
Workshop on microscopic theories of super deformation in heavy nuclei at low spin, Lyon, May 1990,
unpublished.
12. **Single-particle coherent excitation model for quadrupole collective states:**
J. Dobaczewski, S.G. Rohoziński,
Proceedings of the 3rd International Spring Seminar on Nuclear Physics, ed. A. Covello (World Sci-
entific, Singapore, 1991) p. 351.
13. **Studies of deformed nuclei by the generator coordinate method:**
P.-H. Heenen, P. Bonche, J. Dobaczewski, H. Flocard, S.J. Krieger, J. Meyer, M.S. Weiss,
Int. Conf. on High Spin Physics and Gamma-Soft Nuclei, Pittsburgh, 1990, eds. J.X. Saladin,
R.A. Sorensen, C.M. Vincent (World Scientific, Singapore, 1991) p. 79.

14. **Shape isomers: mean-field description and beyond:**
P. Bonche, S.J. Krieger, M.S. Weiss, J. Dobaczewski, H. Flocard, P.-H. Heenen, J. Meyer,
Seventh Int. Symp. on Capture Gamma-Ray Spectroscopy and Related Topics, Asilomar, AIP Conf. Proc. 238 (1990) ed. R.W. Hoff, p. 511.
15. **Shell model calculations at superdeformed shapes:**
W. Nazarewicz, J. Dobaczewski, P. Van Isacker,
Future Directions in Nuclear Physics with 4π Gamma Detection Systems of the New Generation, eds. J. Dudek, B. Haas, (American Institute of Physics, New York, 1992), p. 30.
16. **Triaxial nuclear dynamics of Sr isotopes studied by the generator coordinate method:**
P.-H. Heenen, P. Bonche, J. Dobaczewski, H. Flocard,
Future Directions in Nuclear Physics with 4π Gamma Detection Systems of the New Generation, eds. J. Dudek, B. Haas, (American Institute of Physics, New York, 1992), p. 248.
17. **A mean-field description of shape isomerism:**
P. Bonche, H. Flocard, P.-H. Heenen, J. Meyer, J. Dobaczewski, S.J. Krieger, M.S. Weiss,
Future Directions in Nuclear Physics with 4π Gamma Detection Systems of the New Generation, eds. J. Dudek, B. Haas, (American Institute of Physics, New York, 1992), p. 489.
18. **Discussion summary, section E: Nuclear models and exact algorithms:**
D.R. Bes, J. Dobaczewski, J.P. Draayer, Z. Szymański,
Future Directions in Nuclear Physics with 4π Gamma Detection Systems of the New Generation, eds. J. Dudek, B. Haas, (American Institute of Physics, New York, 1992), p. 513.
19. **Recent Hartree Fock calculations of superdeformed states:**
P. Bonche, J. Dobaczewski, H. Flocard, P.-H. Heenen, S.J. Krieger, J. Meyer, M.S. Weiss,
Jadernaia Spektroskopia i Struktura Atomnowo Jadra, Tezisy докладов 41-wo sowieszczania, Minsk, April 1991, (Nauka, Leningrad, 1991) p. 26.
20. **Diabatic effects and shape coexistence in neutron deficient Pb isotopes:**
N. Tajima, P. Bonche, J. Dobaczewski, H. Flocard, P.-H. Heenen,
Proceedings of a NATO Advanced Research Workshop on Nuclear Shapes and Nuclear Structure at Low Excitation Energies, Cargèse, 1991, eds. M. Vergnes et al., (Plenum, New York, 1992) p. 169.
21. **Microscopic description of superdeformation at low spin:**
P. Bonche, H. Flocard, P.-H. Heenen, J. Meyer, J. Dobaczewski, S.J. Krieger, M.S. Weiss,
Proceedings of a NATO Advanced Research Workshop on Nuclear Shapes and Nuclear Structure at Low Excitation Energies, Cargèse, 1991, eds. M. Vergnes et al., (Plenum, New York, 1992) p. 281.
22. **Boson mappings of collective states in even and odd systems:**
J. Dobaczewski, H.B. Geyer, F.G. Scholtz,
Workshop on Spurious States in Boson Mapping, Philadelphia, November 1991, unpublished.
23. **Nuclear deformation and the p-n interaction:**
J. Dobaczewski,
Workshop on the Microscopic Origin of Nuclear Deformation, Oak Ridge, November 1991, unpublished.
24. **Study of the structure of exotic nuclei by microscopic methods:**
P. Bonche, J. Dobaczewski, H. Flocard, B. Gall, P.-H. Heenen, S.J. Krieger, J. Meyer, J. Skalski, M.S. Weiss,
International Workshop on Physics and Technics of Secondary Nuclear Beams, eds. J.F. Bruandet, B. Fernandez, M. Bex (Editions Frontières, Gif-sur-Yvette, 1992) p. 49.

25. **The Hartree-Fock + BCS and generator coordinate methods:**
P.-H. Heenen, P. Bonche, J. Dobaczewski, H. Flocard, S.J. Krieger, J. Meyer, J. Skalski, N. Tajima, M.S. Weiss,
International Workshop on Nuclear Structure Models, Oak Ridge, 1992, eds. R. Bengtsson, J. Draayer, W. Nazarewicz (World Scientific, Singapore, 1992) p. 3.
26. **Spurious states in collective boson mappings - can they be dealt with effectively?:**
H.B. Geyer, P. Navrátil, F.J.W. Hahne, J. Dobaczewski,
Proceedings of the 4th International Spring Seminar on Nuclear Physics, ed. A. Covello (World Scientific, Singapore, 1992) p. 281.
27. **Boson-fermion mappings of odd systems:**
J. Dobaczewski, F.G. Scholtz, H.B. Geyer,
International Nuclear Physics Conference, Wiesbaden, July 1992, unpublished.
28. **Nuclear shell structure at particle drip lines:**
J. Dobaczewski, I. Hamamoto, W. Nazarewicz, J.A. Sheikh,
Approches microscopiques de la superdeformation nucléaire et des grands moments angulaires, Saclay, October 1993, unpublished.
29. **Microscopic Aspects of Nuclear Deformation:**
T.R. Werner, J. Dobaczewski, M.W. Guidry, W. Nazarewicz, J.A. Sheikh,
Fall Meeting of Nuclear Physics Division of A.P.S., October 1994, Pacific Grove, CA, USA unpublished.
30. **Quadrupole collective states in a large single- j shell:**
K. Burzyński, J. Dobaczewski,
International workshop on high spins and novel deformations, ECT, Trento, 29 November – 18 December 1993*, unpublished.
31. **Predictions for the $^{78}\text{Ni} \rightarrow ^{78}\text{Cu}$ beta decay:**
J. Dobaczewski, Z. Szymański, J. Żylicz,
Proc. of the workshop Nuclear Fission and Fission-Product Spectroscopy, eds. H. Faust, G. Fioni, p. 190.
32. **Boson mappings and phenomenological boson models:**
H.B. Geyer, P. Navrátil, J. Dobaczewski,
Proc. Int. Conf. on Perspectives for the Interacting Boson Model, Padova, 13–17 June 1994, eds. R.F. Casten, A. Vitturi (World Scientific, Singapore, 1995) p. 189.
33. **Shell and neutron-skin effects in r-process isotopes:**
B. Pfeiffer, K.-L. Kratz, P. Möller, J.M. Pearson, J. Dobaczewski, F.-K. Thielemann,
Proc. Int. Conf. on Applications of Nuclear Techniques: "Neutrons and their Applications", Crete 12-18 June 1994, *The International Society for Optical Engineering*, vol.2339, p. 72.
34. **Nuclear model predictions near the neutron drip line relevant to r-process nucleosynthesis:**
Y. Jading, J. Dobaczewski, V.N. Fedoseyev, K.-L. Kratz, V.I. Mishin, P. Möller, B. Pfeiffer, H.L. Ravn, F. Scheerer, F.-K. Thielemann, W.B. Walters, A. Wöhr,
Proc. of the Tours Symposium on Nuclear Physics II, eds. H. Utsunomiya, M. Ohta, J. Galin, G. Münzenberg (World Scientific, Singapore, 1995) p. 49.
35. **Boson-fermion mapping of collective fermion-pair algebras and dynamical supersymmetry in fermion systems:**
H.B. Geyer, P. Navrátil, J. Dobaczewski,

Proceedings of the 5th International Spring Seminar on Nuclear Physics, ed. A. Covello (World Scientific, Singapore, 1995) p. 189.

36. **{Y₄}-type symmetry effects in nuclei: Pros's and contra's:**
J. Dudek, J. Dobaczewski, W.D. Luo, A. Bouguettoucha, X. Li,
Proc. of the Int. Workshop on Physics with Recoil Separators and Detector Arrays, eds. R.K. Bhowmik, A.K. Sinha (Allied Publishers LTD., Bombay, 1995) p. 219.
37. **Drip-line nuclei in self-consistent mean-field theory:**
T.R. Werner, J. Dobaczewski, W. Nazarewicz,
International Conference on Nuclear Structure Around the Turn of the Century, June 30 – July 6, 1995, Crete, reference I.79.
38. **Closed shells at drip lines:**
T.R. Werner, J. Dobaczewski, W. Nazarewicz,
International Conference on Exotic Nuclei and Atomic Masses (ENAM 95), 19-23 June 1995, Arles, France, unpublished.
39. **Hartree-Fock-Bogoliubov theory of nuclei with proton-neutron mixing:**
E. Perlińska, S.G. Rohoziński, J. Dobaczewski, W. Nazarewicz,
Proc. of the Int. Hirschegg Workshop XXIV, Extremes of Nuclear Structure, eds. H. Feldmeier, J. Knoll, W. Nörnberg (GSI, Darmstadt, 1996) p. 228.
40. **High Spin States in Neutron-rich Nuclei:**
S. Mizutori, W. Nazarewicz, W. Satuła, J. Dobaczewski, J. Dudek,
Conference on Nuclear Structure at the Limits, Argonne, 22-26 July 1996, unpublished.
41. **Quadrupole moments in superdeformed bands: Additivity of polarization effects from unique to normal parity orbitals:**
W. Satuła, J. Dobaczewski, J. Dudek, W. Nazarewicz,
Conference on Nuclear Structure at the Limits, Argonne, 22-26 July 1996, unpublished.
42. **Selfconsistent Calculations for Hyperdeformed Nuclei:**
H. Molique, J. Dobaczewski, J. Dudek, W.D. Luo,
Proc. of the Conference on Nuclear Structure at the Limits (Argonne National Laboratory, 1996) p. 117.
43. **The octupole susceptibility of superheavy nuclei:**
S. Ćwiok, J. Dobaczewski, P.-H. Heenen, P. Magierski, W. Nazarewicz,
Erice 96, 16-24 September 1996, Erice, Italy, reference I.78.
44. **Quadrupole polarizabilities in A~150 superdeformed bands:**
W. Satuła, W. Nazarewicz, J. Dobaczewski, J. Dudek,
1996 Fall Meeting of the APS, 2-5 October 1996, Cambridge, USA, Bull. Am. Phys. Soc. 41 (1996) 1242.
45. **Uncertainties in direct neutron capture calculations due to nuclear structure models:**
T. Rauscher, K.-L. Kratz, H. Oberhummer, J. Dobaczewski, P. Möller, M. Sharma,
Fourth International Symposium on Nuclei in the Cosmos, 20 June 1996, Notre Dame, USA, reference I.80.
46. **Hartree-Fock-Bogoliubov theory of proton-neutron pairing in the N~Z nuclei:**
J. Dobaczewski, J. Dobeš, H.B. Geyer, W. Nazarewicz, E. Perlińska, S.G. Rohoziński,
1997 Joint Meeting of the APS/AAPT, 18-21 April 1997, Washington, D.C., Bull. Am. Phys. Soc. 42 (1997) 978.

47. **High-spin γ -ray spectroscopy in the vicinity of ^{56}Ni :**
D. Rudolph, C. Baktash, W. Satuła, J. Dobaczewski, W. Nazarewicz, M.J. Brinkman, M. Devlin, H.-Q. Jin, D.R. LaFosse, L.L. Riedinger, D.G. Sarantites, C.-H. Yu,
6th International Conference on Nucleus-Nucleus Collisions, 2-6 June 1997, Gatlinburg, USA, reference I.84.
48. **Structure of superheavy nuclei in the light of Skyrme-Hartree-Fock theory:**
S. Ćwiok, J. Dobaczewski, P.-H. Heenen, P. Magierski, W. Nazarewicz,
Shell-Model 1997, Stockholm, Sweden, 29 October - 1 November, 1997, unpublished.
49. **Theoretical masses and charge radii of stable and exotic nuclei:**
Z. Patyk, A. Baran, J.F. Berger, J. Dechargé, J. Dobaczewski, P. Ring, A. Sobczewski,
Proc. of the 6th Int. School on Heavy Ion Physics, Dubna, Russia, 22-27 September 1997 (World Scientific, Singapore, 1998) p. 497.
50. **Gamow-Teller decay of even isotopes ^{68}Ni to ^{78}Ni :**
J. Żylicz, J. Dobaczewski, Z. Szymański,
ENAM 98, 2nd Int. Conf. on Exotic Nuclei and Atomic Masses, Bellaire, USA, 23-27 June 1998, AIP Conference Proceedings 455, eds. B.M. Sherrill, D.J. Morrissey, C.N. Davids (AIP, Woodbury, 1998) p. 813.
51. **Prompt proton emission from a rotational band in doubly magic nucleus ^{56}Ni :**
D. Rudolph, C. Baktash, M.J. Brinkman, D.J. Dean, C.-H. Yu, J. Dobaczewski, W. Satuła, W. Nazarewicz, E. Caurier, F. Nowacki, A. Poves, P.-H. Heenen, M. Devlin, D.R. LaFosse, D.G. Sarantites, H.-Q. Jin, L.L. Riedinger,
1999 Centennial meeting of the APS, 22-26 March 1999, Atlanta, USA, Bull. Am. Phys. Soc. 44 (1999) 986.
52. **Boson-fermion realization of Lie algebras and dynamical supersymmetry in fermion systems:**
H.B. Geyer, P. Navrátil, J. Dobaczewski,
Proceedings of the conference on Spin-Statistics Connection and Commutation Relations, Capri, Italy, 31 May - 4 June, 2000, AIP Conference Proceedings 545, eds. R.C. Hilborn, G.M. Tino, (American Institute of Physics, New York, 2000), p. 190.
53. **Rotational properties of neutron drip-line nuclei:**
W. Nazarewicz, J. Dobaczewski, M. Matev, S. Mizutori, W. Satuła,
NATO Advanced Research Workshop: High Spin Physics 2001, Warsaw, Poland, February 6-10, 2001, reference I.108.
54. **Global lifetime measurements of highly-deformed and other rotational structures in the $A \sim 135$ light rare-earth region: probing the single-particle motion in a rotating potential:**
M.A. Riley, R.W. Laird, F.G. Kondev, D.E. Archer, T.B. Brown, R.M. Clark, M. Devlin, P. Fallon, D.J. Hartley, I.M. Hibbert, D.T. Joss, D.R. LaFosse, P.J. Nolan, N.J. O'Brien, E.S. Paul, J. Pfohl, D.G. Sarantites, R.K. Sheline, S.L. Shepherd, J. Simpson, R. Wadsworth, M.T. Matev, A.V. Afanasjev, J. Dobaczewski, G.A. Lalazissis, W. Nazarewicz, W. Satuła,
NATO Advanced Research Workshop: High Spin Physics 2001, Warsaw, Poland, February 6-10, 2001, reference I.109.
55. **Quadrupole deformations of drip-line nuclei:**
M.V. Stoitsov, J. Dobaczewski, W. Nazarewicz, S. Pittel,
Challenges of Nuclear Structure, Proc. of the 7th International Spring Seminar on Nuclear Physics, Maiori, Italy, May 27-31, 2001, ed. A. Covello (World Scientific, 2002), p. 495.

56. **The shears mechanism in ^{142}Gd in the Skyrme-Hartree-Fock method with the tilted-axis cranking:**
P. Olbratowski, J. Dobaczewski, J. Dudek, T. Rząca-Urban, Z. Marcinkowska, R. M. Lieder,
XXVII Mazurian Lakes School of Physics, Growth Points of Nuclear Physics A.D. 2001, Krzyż, Poland, September 2-9, 2001, reference I.111.
57. **High-spin spectroscopy near ^{56}Ni :**
W. Reviol, D.G. Sarantites, R.J. Charity, E. Ideguchi, D. Rudolph, C. Andreoiu, J. Ekman, C. Fahlander, M.N. Mineva, M.A. Bentley, S.J. Williams, R.M. Clark, M. Cromaz, P. Fallon, A.O. Macchiavelli, M.P. Carpenter, D. Seweryniak, J. Dobaczewski,
International Nuclear Physics Conference, Berkeley, USA, 30 July – 3 August, 2001, AIP Conference Proceedings Volume 610, eds. E. Norman, L. Schroeder, G. Wozniak (American Institute of Physics, New York, 2002) p. 844.
58. **Systematic study of deformed nuclei at the drip lines and beyond:**
M.V. Stoitsov, J. Dobaczewski, W. Nazarewicz, S. Pittel,
in Nuclear Theory'21, ed. V. Nikolaev (Heron Press, Sofia, 2002), p. 176.
59. **Mass table mean-field calculations:**
M.V. Stoitsov, W. Nazarewicz, J. Dobaczewski,
Proceedings of the Third Conference on Fission and Neutron-Rich Nuclei, Sanibel, Florida, November 3-9, 2002, ed. by J.H. Hamilton, A.V. Ramayya, and H.K. Carter (World Scientific, New Jersey, 2003), p. 117.
60. **Study of superdeformation in the $A \sim 60$ mass region: High resolution γ -ray spectroscopy at EUROBALL IV with the Recoil Filter Detector and the EUCLIDES charged particle detector:**
J. Dobaczewski, J.P. Vivien, K. Zuber, P. Bednarczyk, T. Byrski, D. Curien, G. de Angelis, O. Dorvaux, G. Duchene, E. Farnea, A. Gadea, B. Gall, J. Grębosz, R. Isocrate, A. Maj, W. Męczyński, J.C. Merdinger, A. Prevost, N. Redon, J. Robin, O. Stezowski, J. Styczeń, M. Ziębliński,
Proceedings of the International Conference on the Labyrinth in Nuclear Structure, Crete, Greece, 13 – 19 July, 2003, AIP Conference Proceedings Volume 701, ed. A. Bracco, A. Kalfas (American Institute of Physics, New York, 2004), p. 273.
61. **Structure of exotic nuclei:**
J. Dobaczewski, N. Michel, W. Nazarewicz, M. Płoszajczak, M.V. Stoitsov,
Proceedings of the International Symposium: A New Era of Nuclear Structure Physics, Kurokawa Village (Niigata Pref.), Japan, November 19-22, 2003 (World Scientific, Singapore, 2004), p. 162.
62. **Particle-Number-Projected HFB Method:**
M.V. Stoitsov, J. Dobaczewski, W. Nazarewicz, J. Terasaki,
International Conference on NUCLEAR PHYSICS, LARGE and SMALL, Microscopic Studies of Collective Phenomena, Hotel Hacienda Cocoyoc, Morelos, México, April 19-22, 2004, AIP Conference Proceedings Volume 726, ed. R. Bijker, R.F. Casten, A. Frank (American Institute of Physics, New York, 2004) p. 57.
63. **Skyrme-QRPA Calculations of Multipole Strength in Exotic Nuclei:**
J. Terasaki, J. Engel, M. Bender, J. Dobaczewski, W. Nazarewicz, M.V. Stoitsov,
The Fourth International Conference on Exotic Nuclei and Atomic Masses Callaway Gardens, Pine Mountain, Georgia, USA, September 12-16, 2004, reference I.131.
64. **Large-Scale HFB Calculations for Deformed Nuclei with the Exact Particle–Number Projection:**

- M.V. Stoitsov, J. Dobaczewski, W. Nazarewicz, J. Terasaki,
The Fourth International Conference on Exotic Nuclei and Atomic Masses Callaway Gardens, Pine Mountain, Georgia, USA, September 12-16, 2004, reference I.132.
65. **On the non-Unitarity of the Bogoliubov Transformation due to the Quasiparticle Space Truncation:**
 J. Dobaczewski, P. Borycki, W. Nazarewicz, M.V. Stoitsov,
The Fourth International Conference on Exotic Nuclei and Atomic Masses Callaway Gardens, Pine Mountain, Georgia, USA, September 12-16, 2004, reference I.133.
66. **Skyrme-Hartree-Fock calculations of fission barriers of the heaviest and superheavy nuclei:**
 A. Staszczak, J. Dobaczewski, W. Nazarewicz,
XI Nuclear Physics Workshop Marie and Pierre Curie, Physics of Exotic Nuclei, Kazimierz Dolny, Poland, September 23-26, 2004, reference I.129.
67. **Particle-Number Projected HFB Method with Skyrme Forces and Delta Pairing:**
 M. Stoitsov, J. Dobaczewski, W. Nazarewicz, J. Terasaki,
Proceedings of the 8th International Spring Seminar on Nuclear Physics, Key Topics in Nuclear Structure, Paestum, Italy, May 23-27, 2004, edited by Aldo Covello (World Scientific, Singapore, 2005), p. 167.
68. **Self-consistent study of fission barriers of even-even superheavy nuclei:**
 A. Staszczak, J. Dobaczewski, W. Nazarewicz,
Proceedings of the 3rd International Workshop on Nuclear Fission and Fission-Product Spectroscopy, Château de Cadarache, Saint Paul lez Durance, France, May 1-14, 2005, AIP Conference Proceedings Volume 798, eds. H. Goutte, H. Faust, G. Fioni, and D. Goutte (American Institute of Physics, New York, 2005) p. 93.
69. **Skyrme-Hartree-Fock and Hartree-Fock-Bogolyubov calculations for nuclei with tetrahedral deformation:**
 P. Olbratowski, J. Dobaczewski, P. Powałowski, M. Sadziak, K. Zberecki,
XII Nuclear Physics Workshop Marie and Pierre Curie, Nuclear Structure and Low Energy Reactions, Kazimierz Dolny, Poland, September 21-25, 2005, reference I.135.
70. **Rotation of Tetrahedral Nuclei in the Cranking Model:**
 N. Schunck, P. Olbratowski, J. Dudek, J. Dobaczewski,
XII Nuclear Physics Workshop Marie and Pierre Curie, Nuclear Structure and Low Energy Reactions, Kazimierz Dolny, Poland, September 21-25, 2005, reference I.136.
71. **Fission barriers of superheavy nuclei in the Skyrme-Hartree-Fock model:**
 A. Staszczak, J. Dobaczewski, W. Nazarewicz,
XII Nuclear Physics Workshop Marie and Pierre Curie, Nuclear Structure and Low Energy Reactions, Kazimierz Dolny, Poland, September 21-25, 2005, reference I.134.
72. **Collective inertia and fission barriers within the Skyrme-Hartree-Fock theory:**
 A. Baran, A. Staszczak, J. Dobaczewski, W. Nazarewicz,
XIII Nuclear Physics Workshop Marie and Pierre Curie, Pairing & Beyond – 50 Years of the BCS Model, Kazimierz Dolny, Poland, September 27 - October 1, 2006, reference I.143.
73. **Nuclei with tetrahedral symmetry:**
 J. Dudek, J. Dobaczewski, N. Dubray, A. Góźdz, V. Pangon, N. Schunck,
XIII Nuclear Physics Workshop Marie and Pierre Curie, Pairing & Beyond – 50 Years of the BCS Model, Kazimierz Dolny, Poland, September 27 - October 1, 2006, reference I.144.

74. **Angular-momentum projection of cranked symmetry-unrestricted Slater determinants:**
H. Zduniczuk, J. Dobaczewski, W. Satuła,
XIII Nuclear Physics Workshop Marie and Pierre Curie, Pairing & Beyond – 50 Years of the BCS Model, Kazimierz Dolny, Poland, September 27 - October 1, 2006, reference I.142.
75. **Pairing properties of superheavy nuclei:**
A. Staszczak, J. Dobaczewski, W. Nazarewicz,
XIII Nuclear Physics Workshop Marie and Pierre Curie, Pairing & Beyond – 50 Years of the BCS Model, Kazimierz Dolny, Poland, September 27 - October 1, 2006, reference I.141.
76. **Bimodal fission in the Skyrme-Hartree-Fock approach:**
A. Staszczak, J. Dobaczewski, W. Nazarewicz,
Zakopane 2006 Conference: Trends in Nuclear Physics, Zakopane, Poland, September 4-10, 2006, reference I.145.
77. **Search for fingerprints of tetrahedral symmetry in ^{156}Gd :**
Q.T. Doan, D. Curien, O. Stężowski, J. Dudek, A. Gózdź, J. Piot, G. Duchêne, B. Gall, H. Molique, M. Richet, P. Medina, N. Redon, Ch. Schmitt, P. Jones, R. Julin, P. Peura, S. Ketelhut, M. Nyman, U. Jakobsson, A. Maj, K. Zuber, K. Mazurek, P. Bednarczyk, N. Schunck, J. Dobaczewski, A. Astier, I. Deloncle, D. Verney, G. de Angelis, J. Gerl,
Zakopane Conference on Nuclear Physics, Zakopane, Poland, September 1-7, 2008, reference I.156.
78. **Global nuclear structure aspects of tensor interaction:**
W. Satuła, M. Zalewski, J. Dobaczewski, P. Olbratowski, M. Rafalski, T.R. Werner, R.A. Wyss,
15th Workshop on Nuclear Physics “Marie and Pierre Curie” 70 Years of Nuclear Fission, Kazimierz Dolny, Poland, 24-28 September, 2008, reference I.158.
79. **Isospin mixing of isospin-projected Slater determinants: formalism and preliminary applications:**
M. Rafalski, W. Satuła, J. Dobaczewski,
15th Workshop on Nuclear Physics “Marie and Pierre Curie” 70 Years of Nuclear Fission, Kazimierz Dolny, Poland, 24-28 September, 2008, reference I.159.
80. **Shell-structure fingerprints of tensor interaction:**
M. Zalewski, W. Satuła, J. Dobaczewski, P. Olbratowski, M. Rafalski, T.R. Werner, R.A. Wyss,
The Fifth International Conference on Exotic Nuclei and Atomic Masses (ENAM), Ryn, Poland, September 7-13, 2008, reference I.165.
81. **Spatial symmetries of the local densities:**
S.G. Rohoziński, J. Dobaczewski, W. Nazarewicz,
16th Workshop on Nuclear Physics “Marie and Pierre Curie” Superheavy and Exotic Nuclei, Kazimierz Dolny, Poland, 23-27 September, 2009, reference I.171.
82. **Finite-range separable pairing interaction within the new N^3LO DFT approach:**
P. Veselý, J. Dobaczewski, N. Michel, J. Toivanen,
10th International Spring Seminar on Nuclear Physics: New Quests in Nuclear Structure, Vietri sul Mare, Italy, 21-25 May, 2010, reference I.180.
83. **Finite-range separable pairing interaction within new N^3LO DFT approach:**
P. Veselý, J. Dobaczewski, N. Michel, J. Toivanen,
Frontiers in Nuclear Structure, Astrophysics, and Reactions, FINUSTAR-3, Rhodes, Greece, 23-27 August, 2010, AIP Conference Proceedings Volume 1377, eds. P. Demetriou, R. Julin, and S.V. Harissopulos (American Institute of Physics, New York, 2011) p. 456.

84. **Isospin mixing in nuclei around $N \simeq Z$ and the superallowed β -decay:**
W. Satuła, J. Dobaczewski, W. Nazarewicz, M. Rafalski,
Zakopane Conference on Nuclear Physics Extremes of the Nuclear Landscape, Zakopane, Poland, August 30-September 5, 2010, reference I.176.
85. **Isospin mixing in the vicinity of the $N = Z$ line:**
W. Satuła, J. Dobaczewski, W. Nazarewicz, M. Borucki, M. Rafalski,
17th Workshop on Nuclear Physics "Marie and Pierre Curie", Kazimierz Dolny, Poland, 22-26 September, 2010, reference I.177.
86. **Fully self-consistent calculations of nuclear Schiff moments in spherical and octupole-deformed nuclei:**
J. Engel, J. Dobaczewski, S. Ban,
International Conference on Advances in Radioactive Isotope Science, ARIS2011, Leuven, Belgium, May 29 – June 3, 2011.
87. **Two-particle transfer matrix elements within the energy density functional method:**
J. Dobaczewski, W. Satuła,
SARFEN meeting, ECT Trento, Italy, March 26-27, 2012, unpublished.*
88. **Deformations and quasiparticle spectra of nuclei in the nobelium region:**
Yue Shi, J. Dobaczewski, P.T. Greenlees, J. Toivanen, P. Toivanen,
Proceedings of the Fifth International Conference on Fission and Properties of Neutron-Rich Nuclei, Sanibel Island, USA, November 4-10, 2012, ed. by J.H. Hamilton and A.V. Ramayya (World Scientific, New Jersey, 2014), p. 381.
89. **New density-independent interactions for nuclear structure calculations:**
K. Bennaceur, J. Dobaczewski, F. Raimondi,
25th International Nuclear Physics Conference (INPC 2013), Florence, Italy, June 2-7, 2013, reference I.198.
90. **Isospin mixing within the multi-reference nuclear density functional theory and beyond - selected aspects:**
W. Satuła, J. Dobaczewski, M. Konieczka, W. Nazarewicz,
EURISOL Topical Meeting 2013 "Going to the limits of mass, spin and isospin with heavy Radioactive Ion Beams", Krakow, Poland, July 1-3, 2013, arXiv:1303.0197.
91. **Isospin mixing within the symmetry restored density functional theory and beyond:**
W. Satuła, J. Dobaczewski, M. Konieczka, W. Nazarewicz,
XXXIII Mazurian Lakes Conference on Physics Frontiers in Nuclear Physics, Piaski, Poland, September 1-7, 2013, reference I.196, arXiv:1310.3936.