

## List of publications in refereed journals

### 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  $^{124}\text{Xe}$  and  $^{126}\text{Xe}$  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  $^{127}\text{Cs}$ :**  
Ch. Droste, D. Chlebowska, J. Dobaczewski, F. Dönau, 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  $^{100}\text{Sn}$  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 netron drip:**  
 P. Haensel, J.L. Zdunik, J. Dobaczewski,  
*Astron. and Astrophys.* **222** (1989) 353.
20. **Charge densities of  $^{208}\text{Pb}$ ,  $^{206}\text{Pb}$ , and  $^{205}\text{Tl}$  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  $^{194}\text{Hg}$ :**  
 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:**  
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*Phys. Lett.* **241B** (1990) 289.
24. **Quadrupole collective correlations and the depopulation of the superdeformed bands in mercury:**  
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25. **Octupole softness of superdeformed  $^{194}\text{Pb}$ :**  
 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,  
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27. **Projection onto physical boson states in a collective subspace:**  
 J. Dobaczewski, H.B. Geyer, F.J.W. Hahne,  
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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, multiclusering, 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  $^{186}\text{Pb}$ : A generator coordinate analysis:**  
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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,  
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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.* **C48** (1993) R2166.
37. **Boson-fermion mappings for odd systems from supercoherent states:**  
 J. Dobaczewski, F.G. Scholtz, H.B. Geyer,  
*Phys. Rev.* **C48** (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.* **B25** (1994) 655.
40. **Nuclear shell structure at particle drip lines:**  
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*Acta Phys. Pol.* **B25** (1994) 541.
41. **Spurious states in boson calculations – spectre or reality?:**  
 P. Navrátil, H.B. Geyer, J. Dobeš, J. Dobaczewski,  
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42. **Superdeformed rotational bands in the mercury region; a cranked Skyrme-Hartree-Fock-Bogoliubov study:**  
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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.* **A574** (1994) 185c.
45. **Microscopic aspects of nuclear deformation:**  
 T.R. Werner, J. Dobaczewski, M.W. Guidry, W. Nazarewicz, J.A. Sheikh,  
*Nucl. Phys.* **A578** (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.* **C50** (1994) 2860.
47. **Isospin impurities in ground states of  $N=Z$  nuclei near the proton-drip line:**  
 J. Dobaczewski, I. Hamamoto,  
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48. **The  $\Delta I=4$  bifurcation in superdeformed bands:**  
 P. Magierski, K. Burzyński, J. Dobaczewski, W. Nazarewicz,  
*Acta Phys. Pol.* **B26** (1995) 291.

49. **Multiclustering and physics of exotic nuclear shapes:**  
 W. Nazarewicz, S. Ćwiok, J. Dobaczewski, J.X. Saladin,  
*Acta Phys. Pol. B* **26** (1995) 189.
50. **Limits of Proton Stability Near  $^{100}\text{Sn}$ :**  
 J. Dobaczewski, W. Nazarewicz,  
*Phys. Rev. C* **51** (1995) R1070.
51. **Quadrupole-collective states in a large single- $j$  shell:**  
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*Phys. Rev. C* **51** (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  $^{194}\text{Pb}$ :**  
 J. Meyer, P. Bonche, M.S. Weiss, J. Dobaczewski, H. Flocard, P.-H. Heenen,  
*Nucl. Phys. A* **588** (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,  
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57. **SDG fermion-pair algebraic  $\text{SO}(12)$  and  $\text{Sp}(10)$  models and their boson realizations:**  
 P. Navrátil, H.B. Geyer, J. Dobeš, J. Dobaczewski,  
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58. **Boson-fermion mapping of collective fermion-pair algebras:**  
 P. Navrátil, H.B. Geyer, J. Dobaczewski,  
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59. **Time-odd components in the mean field of rotating superdeformed nuclei:**  
 J. Dobaczewski, J. Dudek,  
*Phys. Rev. C* **52** (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. A* **593** (1995) 1.
61. **Excited superdeformed band in  $^{142}\text{Sm}$  identical to  $^{146}\text{Gd}$ :**  
 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. Pilote, A.T. Semple, I. Thorslund, J. Timar, P. Vaska, J.C. Waddington, L. Walker,  
*Phys. Rev. C* **52** (1995) R2293.

62. **Microscopic study of a  $C_4$ -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.* **C52** (1995) 2989.
63. **Physics of drip-line nuclei:**  
 T.R. Werner, J. Dobaczewski, W. Nazarewicz,  
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64. **Neutron radii and skins in the Hartree-Fock-Bogoliubov calculations:**  
 J. Dobaczewski, W. Nazarewicz, T.R. Werner,  
*Z. Phys.* **A354** (1996) 27.
65. **Time-odd components in the rotating mean field and identical bands:**  
 J. Dobaczewski, J. Dudek,  
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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,  
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67. **Calculation of decay properties of very neutron-rich nuclei with a modified Nilsson potential:**  
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68. **Proton localization in neutron star matter:**  
 K. Burzyński, J. Dobaczewski,  
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69. **Structure of proton drip-line nuclei around doubly magic  $^{48}\text{Ni}$ :**  
 W. Nazarewicz, J. Dobaczewski, T.R. Werner, J.A. Maruhn, P.G. Reinhard,  
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70. **Mean-field description of ground-state properties of drip-line nuclei: Pairing and continuum effects:**  
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71. **Boson-fermion Dyson mapping and supersymmetry in fermion systems:**  
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72. **Antiprotonic studies of nuclear neutron haloes:**  
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73. **Additivity of Quadrupole Moments in Superdeformed Bands: Single-Particle Motion at Extreme Conditions:**  
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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,  
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76. **Solution of the Skyrme-Hartree-Fock equations in the Cartesian deformed harmonic oscillator basis. (I) The method:**  
 J. Dobaczewski, J. Dudek,  
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77. **Solution of the Skyrme-Hartree-Fock equations in the Cartesian deformed harmonic oscillator basis. (II) The program HFODD:**  
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78. **The octupole susceptibility of superheavy nuclei:**  
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79. **Drip-line nuclei in self-consistent mean-field theory:**  
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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,  
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81. **Shell effects in superdeformed minima:**  
 P.-H. Heenen, J. Dobaczewski, W. Nazarewicz, P. Bonche, T.L. Khoo,  
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82. **Dependence of direct neutron capture on nuclear structure models:**  
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*Phys. Rev.* **C57** (1998) 2031.
83. **Prompt proton decay of a well-deformed rotational band in  $^{58}\text{Cu}$ :**  
 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,  
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84. **High-spin  $\gamma$ -ray spectroscopy in the vicinity of  $^{56}\text{Ni}$ :**  
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85. **Theoretical aspects of science with radioactive nuclear beams:**  
 J. Dobaczewski, W. Nazarewicz,  
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86. **Odd-even staggering of nuclear masses: pairing or shape effect?:**  
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87. **Masses and radii of spherical nuclei calculated in various microscopic approaches:**  
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88. **Rotational bands in the doubly magic nucleus  $^{56}\text{Ni}$ :**  
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89.  **$\beta$  decay rates of r-process waiting-point nuclei in a self-consistent approach:**  
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90. **Shape coexistence and the effective nucleon-nucleon interaction:**  
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91. **Comparison of superdeformed bands in  $^{61}\text{Zn}$  and  $^{60}\text{Zn}$ : Possible evidence for  $T = 0$  pairing:**  
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92. **Continuum effects for the mean-field and pairing properties of weakly bound nuclei:**  
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93. **Structure of nuclei at extreme values of the isospin:**  
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94. **Superdeformed bands in  $^{32}\text{S}$  and neighboring nuclei predicted within the Hartree-Fock method:**  
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96. **Nuclear skins and halos in the mean-field theory:**  
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97. **Generalization of the Bloch-Messiah-Zumino theorem:**  
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98. **Point symmetries in the Hartree-Fock approach: Densities, shapes and currents:**  
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100. **Microscopic study of superdeformed rotational bands in  $^{151}\text{Tb}$ :**  
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102. **Superdeformed and highly deformed bands in  $^{65}\text{Zn}$  and neutron-proton interactions in Zn isotopes:**  
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251. **Opportunities for Fundamental Physics Research with Radioactive Molecules:**  
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252. **Electromagnetic properties of indium isotopes elucidate the doubly magic character of  $^{100}\text{Sn}$ :**  
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254. **Two-center harmonic oscillator basis for Skyrme-DFT calculations (I): formalism and Proof of Principle:**  
 A. Sánchez-Fernández, J. Dobaczewski, X. Sun, and H. Wibowo,  
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255. **Reduction in Nuclear Size and Quadrupole Deformation of High-Spin Isomers of  $^{127,129}\text{In}$ :**  
A.R. Vernon, C.L. Binnersley, R.F. Garcia Ruiz, K.M. Lynch, T. Miyagi, J. Billowes, M.L. Bissell, T.E. Cocolios, J.P. Delaroche, J. Dobaczewski, M. Dupuis, K.T. Flanagan, W. Gins, M. Girod, G. Georgiev, R.P. de Groote, J.D. Holt, J. Hustings, Á. Koszorús, D. Leimbach, J. Libert, W. Nazarewicz, G. Neyens, N. Pillet, P.-G. Reinhard, S. Rothe, B.K. Sahoo, S.R. Stroberg, S. Wilkins, X.F. Yang, Z.Y. Xu, and D. Yordanov,  
*Phys. Rev. Lett.* **134** (2025) 252501.
256. **Moments of inertia of rare-earth nuclei and the nuclear time-odd mean fields within exact solutions of the adiabatic theory:**  
X. Sun, J. Dobaczewski, M. Kortelainen, J. Sadhukhan, A. Sánchez-Fernández, H. Wibowo,  
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257. **Electromagnetic moments in the Sn-Gd region determined within the nuclear DFT:**  
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## II. Papers submitted for publication in periodicals and in press

1. **Laser spectroscopy of actinium monofluoride as a sensitive probe for CP violation:**  
M. Athanasakis-Kaklamanakis, M. Au, A. Kyuberis, C. Zülch, K. Gaul, H. Wibowo, L. Skripnikov, L. Lalanne, J. R. Reilly, Á. Koszorús, S. Bara, J. Ballof, R. Berger, A. Borschevsky, A. A. Breier, T. E. Cocolios, R. P. de Groote, A. Dorne, J. Dobaczewski, K. T. Flanagan1, S. Franchoo, J. D. Johnson, R. F. Garcia Ruiz, D. Hanstorp, S. Kujanpää, Y. C. Liu, K. M. Lynch, A. McGlone, N. S. Mosyagin, G. Neyens, M. Nichols, L. Nies, A. V. Oleynichenko, F. Pastrana, S. Rothe, W. Ryssens, B. van den Borne, J. Wessolek, S. G. Wilkins, X. F. Yang, A. Zaitsevskii,  
*submitted to, Nature Physics*.
2. **Quadrupole Strength in Isobaric Triplets:**  
B. C. Backes, J. Dobaczewski, D. Muir, W. Nazarewicz, P.-G. Reinhard, M. A. Bentley, R. Wadsworth,  
*submitted to, Physical Review C*  
*arXiv:2505.15375*.
3. **Extraction of ground-state nuclear deformations from ultra-relativistic heavy-ion collisions: Nuclear structure physics context:**  
J. Dobaczewski, A. Gade, K. Godfrey, R. V. F. Janssens, W. Nazarewicz,  
*submitted to, Physical Review R*  
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## III. Popularized papers for general public

1. **O obrotach ciał niewielkich (I):**  
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2. **O obrotach ciał niewielkich (II):**  
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3. **Prawdopodobieństwo rozpadu promieniotwórczego:**  
J. Dobaczewski,  
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4. **The atomic nucleus as a laboratory:**  
H. Białkowska, Z. Sujkowski, J. Dobaczewski,  
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5. **The atomic nucleus: greater than the sum of its parts:**  
J. Dobaczewski,  
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6. **Physics: Nuclear Density Functional Theory for determining the properties of atomic nuclei:**  
J. Dobaczewski,  
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## 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,  
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2. **Real coherent states for fermion systems:**  
J. Dobaczewski, S.K. Koonin,  
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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.*
4. **Excited superdeformed bands in  $^{148}\text{Gd}$ : 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. Kharraja, J.C. Merdinger, S.M. Mullins, S. Pilotte, D.C. Radford, C. Rigolet, 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,  
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6. **HFODD (v2.40h): User's Guide:**  
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8. **Density functional theory for nuclear fission - a proposal:**  
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## V. Conference invited and contributed talks

1. **Nuclear deformation: A proton-neutron effect?:**  
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2. **Hartree-Fock description with quadrupole correlations of superdeformed states in lead:**  
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3. **Hartree-Fock description of superdeformed states:**  
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4. **Coherent states and boson-fermion mapping:**  
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5. **Nuclear shell structure at particle drip lines:**  
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6. **Nuclear Structure at the Proton and Neutron Drip Lines:**  
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7. **Closed shells at drip-line nuclei:**  
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8. **Pairing correlations at drip lines:**  
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9. **Nuclear structure aspects of exotic nuclei:**  
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10. **Mean-field description of drip-line nuclei:**  
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11. **Pairing correlations in drip-line nuclei:**  
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12. **Time-odd components in the rotating mean field and identical bands:**  
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13. **Jądra dalekie od linii stabilności beta: nowe wino w starej beczce (in Polish):**  
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15. **Cranking Hartree-Fock description of rotating superdeformed nuclei:**  
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16. **Hartree-Fock approach:**  
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18. **Properties of Drip-Line Nuclei Studied With Self-Consistent Mean-Field Methods:**  
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19. **Rotational Bands in Superdeformed Nuclei:**  
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28. **Structure of nuclei at extreme values of the isospin:**  
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37. **Recent developments in mean-field studies of exotic nuclei:**  
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38. **High-spin and high-isospin phenomena in present-day nuclear structure theoretical studies:**  
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91. **Nuclear density functional theory (recent applications & extensions):**  
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110. **Effective theory for low-energy nuclear energy density functionals:**  
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113. **Adiabatic TDDFT + discussion:**  
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114. **Teorie jądrowego funkcjonału gęstości:**  
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118. **Energy-density-functional calculations including proton-neutron mixing:**  
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119. **Isospin Violation & Nuclear Decays:**  
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120. **Nuclear Density Functional Theory and beyond:**  
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127. **Nuclear structure with novel non-local density functionals:**  
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129. **Isospin and angular-momentum projection plus configuration interaction:**  
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130. **Novel energy density functionals for low-energy nuclear phenomena:**  
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131. **Density Functionals for Heavy and Superheavy Nuclei:**  
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132. **Density Functional Theory and Self-Consistent Methods:**  
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133. **Regularized finite-range DFT generators with pairing:**  
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138. **Recent progress in building novel nonlocal energy density functionals:**  
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139. **Jądrowe funkcjonały gęstości (in Polish):**  
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140. **DFT nuclear magnetic moments:**  
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141. **Nuclear magnetic moments:**  
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142. **Octupole correlations in radium and around it:**  
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143. **Nuclear Schiff and octupole moments of the actinides:**  
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144. **Search for novel nuclear density functionals:**  
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**149. Isobaric Multiplet Mass Equation within nuclear Density Functional Theory:**

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**152. Octupole correlations in actinides:**

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**154. Shape coexistence in neutron deficient mercury isotopes:**

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**155. Nuclear magnetic moments and time-odd properties of density functionals:**

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156. **Nuclear magnetic moments in EDF approaches:**  
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157. **Electromagnetic moments in nuclei within nuclear DFT:**  
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158. **Studies of electromagnetic moments in nuclei within nuclear DFT:**  
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