

CURRICULUM VITAE

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List of Publications

1. Goldman, D.; Silva, E. and **de Toledo Piza, A. F. R.** “ ^{38}K Isomeric State Formation by (γ, n) Reaction”, *Il Nuovo Cimento* **25**,41- (1962)
2. Brink, D. M.; Kerman, A. K. and **de Toledo Piza, A. F. R.** “Interval Rules and Intensity Ratios in Vibrating Spherical Nuclei”, *Phys. Letters* **19**, 413-415 (1965)
3. **de Toledo Piza, A. F. R.**; Kerman, A. K.; Fallieros, S. and Venter, R. H., “Damping of Isobaric Analogue States”, *Nucl. Phys.* **89**, 369-376 (1966)
4. **de Toledo Piza, A. F. R.** and Kerman, A. K., “Studies in Isobaric Analogue Resonances I - Gross Properties”, *Ann. Phys. (N.Y.)* **43**, 363-381 (1967)
5. Kerman, A. K. and **de Toledo Piza, A. F. R.**, “Studies in Isobaric Analogue Resonances II - Fine Structure”, *Ann. Phys. (N.Y.)* **48**, 173-194 (1968)
6. Kerman, A. K. and **de Toledo Piza, A. F. R.**, “Intensity Rules for Partial Widths of Deformed Analog Resonances”, *Ann. Phys. (N.Y.)* **66**, 351-365 (1971)
7. **de Toledo Piza, A. F. R.**, “Analogue Resonances in Isospin Forbidden Deuteron Channels”, *Nucl. Phys.* **A184**, 303-320 (1972)
8. Coelho, H. T., Coutinho, F. A. B. and **de Toledo Piza, A. F. R.**, “Backscattering of α particles by light nuclei”, *Phys. Rev.* **C14**, 1280-1284 (1976)
9. Nemes, M. C., Perazzo, R. P. J. and **de Toledo Piza, A. F. R.**, “Scattering by a schematic potential landscape”, *Lett. al Nuovo Cim.* **18**, 291-296 (1977)

10. Nemes, M. C. and **de Toledo Piza, A. F. R.**, “A Quantum phenomenology of viscosity”, *Rev. Bras. Fis.* **7**, 261-270 (1977)
11. **de Toledo Piza, A. F. R.**, de Passos, E. J. V., Galetti, D., Nemes, M. C. and Watanabe, M. M., “Properties of Griffin-Hill-Wheeler Spaces”, *Phys. Rev.* **C15**, 1477-1482 (1977)
12. **de Toledo Piza, A. F. R.** and de Passos, E. J. V., “On the Kinematics of Generator Coordinates”, *Nuovo Cim.* **45B**, 1-30 (1978)
13. Galetti, D. and **de Toledo Piza, A. F. R.**, “Numerical treatment of the Griffin-Hill-Wheeler Equation”, *Phys. Rev.* **C17**, 774-776 (1978)
14. Chen, H. T. and **de Toledo Piza, A. F. R.**, “Variations on the Hydrogen Atom”, *Am. Jour. Phys.* **47**, 1063-1066 (1979)
15. De Passos, E. J. V. and **de Toledo Piza, A. F. R.**, “Properties of Griffin-Hill-Wheeler spaces II”, *Phys. Rev* **C21**, 425-438 (1980)
16. Galetti, D. and **de Toledo Piza, A. F. R.**, “Collective Hamiltonians in the Generator Coordinate Method: Isoscalar Monopole Vibrations in Light Spherical Nuclei”, *Phys. Rev.* **C24**, 2311-2321 (1981)
17. Nemes, M. C. and **de Toledo Piza, A. F. R.**, “Non Unitary effects in the time evolution of one-body observables”, *Phys. Rev.* **C27**, 862-871 (1983)
18. Nemes, M. C. and **de Toledo Piza, A. F. R.**, “Collisional spreading of small amplitude nuclear vibrations”, *Zeit. Phys.* **A310**, 339-344 (1983)
19. Nemes, M. C. and **de Toledo Piza, A. F. R.**, “Quantization of a phenomenological viscous force”, *Phys. Rev.* **A27**, 1199-1202 (1983)
20. Pessoa, E. F. and **de Toledo Piza, A. F. R.**, “Analysis of stripping to isolated analog resonances”, *Phys. Rev.* **C29**, 403-408 (1984)

21. Tostes, J. G. R. and **de Toledo Piza, A. F. R.**, “Nonadiabatic generator coordinate calculation of H_2^+ ”, Phys. Rev. **A28**, 538-543 (1984)
22. Nemes, M. C. and **de Toledo Piza, A. F. R.**, “Harmonic approximation to small amplitude nuclear vibrations”, Zeit. Phys. **A319**, 323-325 (1984)
23. Nemes, M. C. and **de Toledo Piza, A. F. R.**, “Dynamics of the one-body density: small amplitude regime”, Phys. Rev. **C31**, 613-620 (1985)
24. Corradi Rabelo, M. L. and **de Toledo Piza, A. F. R.**, “Collision dynamics of the coherent Jaynes-Cummings model”, Rev. Bras. Fis. **14**, 353-363 (1984)
25. Nemes, M. C. and **de Toledo Piza, A. F. R.**, “Collision Terms and Effective Interactions”, Phys. Lett. **172B**, 119-121 (1986)
26. Nemes, M. C. and **de Toledo Piza, A. F. R.**, “Effective dynamics of quantum subsystems”, Physica **137A**, 367-388 (1986)
27. Carlson, B. V., Nemes, M. C. and **de Toledo Piza, A. F. R.**, “Quantum Collisional Evolution of a one-dimensional Fermi Gas: Numerical Solution”, Nucl Phys. **A457**, 261-272 (1986)
28. **de Toledo Piza, A. F. R.**, “Scattering in particle-hole space: simple approximation to nuclear RPA calculation in the continuum”, Rev. Bras. Fis. **17**, 195-212 (1987)
29. Nemes, M. C., **de Toledo Piza, A. F. R.** and da Providência, J., “Van Kampen waves in extended Fermi systems and the Random Phase Approximation”, Physica **146A**, 282-294 (1987)
30. Galetti, D. and **de Toledo Piza, A. F. R.**, “Extended Weyl-Wigner transformation for special finite spaces”, Physica **149A**, 267-282 (1988)

31. Nielsen, M. and **de Toledo Piza, A. F. R.**, “Density-matrix expansion in the Gaussian wave packet phase space representation”, *Phys. Rev.* **C39**, 720-723 (1989)
32. Cruz Barrios, S. and **de Toledo Piza, A. F. R.**, “Functional mean-field expansion for the many-body initial condition problem”, *Physica* **159A**, 440-458 (1989)
33. Lin Chi Yong and **de Toledo Piza, A. F. R.**, “Kinetic Approach to the initial value problem in Quantum Field Theory”, *Mod. Phys. Lett.* **A5**, 1605-1614 (1990)
34. Salvetti, A. R. and **de Toledo Piza, A. F. R.**, “Width of M1 states in even Ca isotopes”, *Rev. Bras. Fis.* **20**, 347-355 (1990).
35. Mariano, A., Bauer, E., Krmpotic, F. and **de Toledo Piza, A. F. R.**, “Ground-State Correlations and Transverse Electron Scattering”, *Phys. Lett.* **268B**,332-338 (1991)
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37. Lin Chi Yong and **de Toledo Piza, A. F. R.**, “Kinetic Approach to the initial value problem in ϕ^4 field theory”, *Phys. Rev.* **D46**, 742-756 (1992)
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94. **de Toledo Piza, A. F. R.**, “Bose-Einstein condensation in Dilute Atomic Gases”, Braz. Jour. Phys. **34**, 1102-1157 (2004).
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96. Tommasini, P., de Passos, E. J. V., Pires, M. O. C. and **de Toledo Piza, A. F. R.**, “Extended Hartree-Fock-Bogoliubov theory for degenerate Bose systems”, J. Phys.: Condens. Matter **17**, 3165 (2005).
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99. Cornelio, Marcio F. and **de Toledo Piza, A. F. R.**, “Classification of Tripartite Entanglement with one Qubit”, Phys. Rev. **A73**, 032314 (2006) [9 pages].

100. Salgueiro, A. N., **de Toledo Piza, A. F. R.**, Lemos, G. B., Drumond, R., Nemes, M. C. and Weidemller, M., “Quantum dynamics of bosons in a double-well potential: Josephson oscillations, self-trapping and ultralong tunnelling times”, *Eur. Phys. J.* **D44**, 537-540 (2007).
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Books

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- Schrödinger & Heisenberg, A Física além do senso comum, Col. Imortais da Ciência, Odysseus Editora, 225 pages, 2003.

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