

## Curriculum Vitae

Surname: Civitarese

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Official Address: Department of Physics. University of La Plata- c.c.67  
(1900) La Plata. Argentina.

Degree: Ph.D of the University of La Plata. Argentina. 1974.

### PostDoctoral experience

-Niels Bohr Institute. Copenhagen. Denmark. 1975-1978.

-Kernforschungsanlage Julich. Institut fur Kernphysik.1978-1980

### Academic Experience

-Adjoint Professor of the Dept of Physics. Univ.of La Plata (1979/1985)

-Full Professor of Theoretical Physics.Dept of Physics. Univ.of La Plata  
(since 1986).

### Visiting Professorships

- Institut fur Theoretische Physik.University of Tuingen. Germany. december 1985/april 1986, december 1986/february 1987,april 1990/april 1991,
- California Institute of Technology.Pasadena. USA.june/july 1987,
- Dept of Physics.University of Iowa.USA.dec 1988/march 1989.
- Department of Physics. University of Jyvaskyla. Feb-march 1998, 2000,
- Professor of Excellence at the RCNP. Universidad de OSAKA, january-march 1999.
- University of Jyvaskyla. Feb-march 2001/03/04/05/06/07/08/09/10/11/12/13

### Research Experience:

- Member of the Scientific Research Council of Argentina (since 1980-continued) (actual position: Investigador Superior)
- Senior Associate Member of the ICTP (UNESCO, Trieste)
- Affiliate of the INT-Seattle.USA.
- Affiliate of the ECT\*(Trento).

### Administrative Experience:

- Chairman of the Department of Physics. University of La Plata. 1987-1988
- Chairman of the Department of Physics. University of La Plata. 2006-2007
- Member of the Advisory Committee for Physics, National Research Council (1988,1989).
- Member of the Evaluation Committee for Universities (CONEAU) of Argentina (2005,2006)

-Member of the Joint Committee of the State Research Council (CI-CPBA) (since 2001-continued)

-CO-responsible of the ANDES Project

Honors and mentions:

- 1) Summa Cum Lauda University of La Plata. 1974
- 2) Alexander von Humboldt Foundation. 1979
- 3) J.S. Guggenheim Foundation. 1997
- 4) Medal Bernardo Houssay, Secretary of Science of Argentina. 2003
- 5) Medal Guido Beck. Academy of Science of Argentina. 2004
- 6) Member of the Mexican Academy of Science (since 2005).
- 7) Foundation KONEX. Diploma 2013 (Physics and Astronomy).

Experience as Ph.D thesis advisor

- 1) Ph.D Advisor: 15 Ph.D Thesis (oriented and approved)
- 2) Diploma Work Advisor: 17 Diploma Thesis (oriented and approved)

## List of Publications (june 2013)

*List of publications in Journals (peer reviewed)*

1. Structure of the odd mass Ge isotopes with a particle phonon coupling.  
R.Almar, O.Civitarese, F.Krmpotic, J.Navaza.  
Physical Review **C 6** (1972)187.
2. Investigation of the non unique first forbidden beta decay transition in  $^{141}\text{Cd}$ .  
O.Civitarese, F.Krmpotic, M.C.Cambiaggio, L.Szybisz.  
Physical Review **C 7** (1973) 768.
3. Properties of odd mass iodine isotopes in a particle phonon coupling.  
R.Almar, O.Civitarese, F.Krmpotic.  
Physical Review **C 8** (1973) 1518.
4. Generalized semi-microscopic model in odd mass indium isotopes.  
S.Abecasis, O.Civitarese, F.Krmpotic.  
Physical Review **C 9** (1974) 2320.
5. On the coupling phenomena between the  $S = 0$  and  $S = 1$  charge exchange dipole modes.  
O.Civitarese, F.Krmpotic, L.Szybisz.  
Physics Letters **B 48** (1974) 199.
6. Interpretation of the properties of the odd mass silver isotopes in the models of De Shalit and Alaga.  
O.Civitarese, F.Krmpotic.  
Nuclear Physics **A 229** (1974) 133.
7. A possible test for the ground state correlations in superfluid nuclei.  
O.Civitarese, A.Plastino, S.Peltier, S.Hernandez.  
Lettere Nuovo Cimento **11** (1974) 596.
8. Quasiparticle phonon coupling and the beta decay to the one phonon collective state.  
O.Civitarese, F.Krmpotic.  
Physics Letters **B 56** (1975) 123.

9. On the beta decay  $2^-(^{122}\text{Sb}) \rightarrow 2^+(\text{}^{122}\text{Te})$ .  
H.Bosch, M.C.Cambiaggio, O.Civitarese, F.Krmpotic, L.Szybisz  
Nuclear Physics **A 272** (1976) 189.
10. Analysis of the odd mass Tc isotopes with the Alaga model  
S.Abecasis, O.Civitarese, F.Krmpotic.  
Zeitschrift fur Physik **A 278** (1976) 309.
11. Role of the Pauli principle in the spectrum of  $^{208}\text{Pb}$   
O.Civitarese, R.A.Brogia, D.R.Bes  
Physics Letters **B 72** (1977) 45.
12. On the excitation of nuclear surface modes in the deep inelastic collision  
of Kr on Pb.  
R.A.Brogia, O.Civitarese, C.H.Dasso, Aa.Winther  
Physics Letters **B 73** (1978) 405.
13. Generalized lattice density waves in nuclear matter.  
O.Civitarese, A.Plantino, A.Faessler.  
Z fur Physik **A 291** (1979) 239.
14. On the side feeding pattern and multiplicities in  $^{26}\text{Mg}(^{136}\text{Xe}, 4n)^{158}\text{Dy}$ .  
O.Civitarese, A.Faessler, M.Wakai.  
Physics Letters **B 84** (1979) 404.
15. The pairing correlations and nuclear shapes at very high angular momentum.  
A.Ansari, O.Civitarese, A.Faessler.  
Nuclear Physics **A 334** (1980) 93.
16. Skyrme HF treatment of asymmetric nuclear matter  
O.Civitarese, A.Plantino, A.Faessler.  
Zeitschrift fur Physik **A 298** (1980) 31.
17. Perturbative treatment of nuclear rotations:three dimensional case.  
D.R.Bes, O.Civitarese, H.M.Sofia.  
Nuclear Physics **A 370** (1981) 99.

18. Thermal HF in the thermodynamic limit: Statistical approach.  
O.Civitarese, A.De Paoli, A.Plastino.  
Zeitschrift fur Physik **A 305** (1982) 341.
19. Lattice density waves in nuclear matter at finite temperature.  
O.Civitarese, A.De Paoli, A.Plastino, M.de Llano.  
Zeitschrift fur Physik **A 307** (1982) 323.
20. On the Strutinsky shell correction method at finite temperature  
O.Civitarese, A.De Paoli, A.Plastino.  
Zeitschrift fur Physik **A 309** (1982) 177.
21. Renormalization of the axial vector coupling constant  
by the charge conserving fields: cancellation effects.  
O.Civitarese, F.Krmpotic.  
Physics Letters **B 122** (1983) 121.
22. Non local effects induced by the particle vibration coupling.  
O.Civitarese, R.P.J.Perazzo, S.L.Reich, M.Saraceno.  
Zeitschrift fur Physik **A 311** (1983) 135.
23. Temperature dependent shell corrections: Numerical estimates for the  
lead region.  
O.Civitarese, A.De Paoli, A.Plastino.  
Zeitschrift fur Physik **A 311** (1983) 317.
24. Multistep nature of heavy ion fusion reactions.  
O.Civitarese, B.V.Carlson, M.S.Hussein, A.Szanto de Toledo.  
Physics Letters **B 125** (1983) 22.
25. The giant quadrupole resonance in highly excited rotating nuclei.  
O.Civitarese, S.Furui, M.Ploszjaczack, A.Faessler.  
Nuclear Physics **A 408** (1983) 61.
26. Thermal aspects of the pairing correlations in finite nuclei.  
O.Civitarese, G.G.Dussel, R.P.J.Perazzo.  
Nuclear Physics **A 404** (1983) 15.
27. Pairing correlations at high spin and finite temperature: a modified  
BCS approach.

- O.Civitarese, A.Plastino, A.Faessler.  
Journal of Physics **G 9** (1983) 1063.
28. On clustering effects and phase instabilities in high energy nuclear collisions.  
O.Civitarese, A.Plastino.  
Zeitschrift fur Physik **A 313** (1983) 139.
29. Pairing effects at finite temperature and finite rotational frequency: an exactly soluble model.  
O.Civitarese, A.Plastino, A.Faessler.  
Zeitschrift fur Physik **A 313** (1983) 197.
30. Particle vibration coupling effects in  $^{211}\text{At}$ .  
O.Civitarese, O.A.Rosso.  
Zeitschrift fur Physik **A 315** (1984) 333.
31. On the temperature dependence of the nuclear response.  
O.Civitarese, R.A.Brogia, C.H.Dasso.  
Annals of Physics **156** (1984) 142.
32. Theoretical description of the  $1/2(693\text{KeV})3/2$  first forbidden beta decay transition in  $^{111}\text{Ag}$ .  
O.Civitarese, O.A.Rosso.  
Zeitschrift fur Physik **A 317** (1984) 201.
33. A reformulation of the perturbative treatment of a system of fermions in a deformed basis.  
V.Alessandrini, D.R.Bes, O.Civitarese, M.T.A.Mehr.  
Physics Letters **B 148** (1984) 395.
34. Modified BCS treatment of pairing correlations in  $^{240}\text{Pu}$  at high spin and finite temperature.  
O.Civitarese, M.Faber, H.Markum, A.Plastino.  
Nuclear Physics **A 438** (1985) 318.
35. The nuclear level density parameter and temperature dependent effects in finite nuclei.  
O.Civitarese, A.De Paoli.  
Nuclear Physics **A 440** (1985) 480.

36. Temperature dependent effects and statistical gamma ray multiplicities in the  $^{147}\text{Sm}(3\text{He}, a)^{146}\text{Sm}$  reaction.  
O.Civitarese, A.De Paoli.  
Zeitschrift fur Physik **A 321** (1985) 473.
37. Finite temperature effects and phase transitions in the pairing force problem:variational approach.  
G.Bozzolo, O.Civitarese.  
Physical Review **C 32** (1985) 2111.
38. The dinucleus:a doorway to heavy ion fusion.  
M.Hussein, B.V.Carlson, O.Civitarese, A.Szanto de Toledo.  
Physical Review Letters **54** (1985) 2659.
39. Two particle transfer reactions leading to giant pairing resonances.  
M.Herzog, O.Civitarese, L.Ferreira, R.J.Liotta, T.Vertse, L.Sibanda.  
Nuclear Physics **A 448** (1986) 441.
40. Collective effects induced by the charge exchange vibrational fields on  $0^- \rightarrow 0^+$  and  $2^- \rightarrow 0^+$  first forbidden beta decay transitions.  
O.Civitarese, F.Krmpotic, O.A.Rosso.  
Nuclear Physics **A 453** (1986) 45.
41. Multistep compound model of heavy ion fusion.  
B.V.Carlson, O.Civitarese, M.S.Hussein, A.Szanto de Toledo.  
Annals of Physics **169** (1986) 167.
42. Pairing effects at finite temperature:fermionic and bosonic contributions to the specific heat of the nucleus.  
F.Alasia, O.Civitarese, M.Reboiro.  
Physical Review **C 35**(1987) 812.
43. Spin and orbital contributions to collective M1 transitions in  $^{46,48}\text{Ti}$ .  
R.Nojarov, A.Faessler, O.Civitarese.  
Physics Letters **B 183**(1987) 122.
44. Excitation energies and intensities of  $\lambda^\pi = 0^-, 2^-$  charge exchange modes in spherical nuclei.  
O.Civitarese, O.A.Rosso.  
Zeitschrift fur Physik **A 327** (1987) 51.



45. Temperature dependent effects upon statistical particle and gamma ray emission from a compound nucleus.  
G.Batko, O.Civitarese, A.De Paoli.  
Zeitschrift fur Physik **A 327**(1987) 323.
46. On the temperature dependence of the level density parameter and its effects upon neutron evaporation spectra.  
G.Batko, O.Civitarese, A.De Paoli.  
Zeitschrift fur Physik **A 327**(1987) 329.
47. Compound nucleus temperatures from particle and gamma ray emissions:effects due to the temperature dependence of the level density parameter.  
G.Batko, O.Civitarese, A.De Paoli.  
Physical Review **C 36** (1987) 435.
48. Suppression of the two neutrino double beta decay.  
O.Civitarese, A.Faessler, T.Tomoda.  
Physics Letters **B 194** (1987) 11.
49. Vibrational modes at finite temperature : restoring force and mass parameters for multipole excitations.  
F.Alasia, O.Civitarese, M.Reboiro.  
Physical Review **C 36** (1987) 2555.
50. Theoretical description of low lying  $1^+$  states in deformed nuclei.  
O.Civitarese, A.Faessler, R.Nojarov.  
Physical Review **C 35** (1987) 2310.
51. Application of Gamow resonances in continuum nuclear spectra.  
T.Vertse, P.Curuchet, O.Civitarese, L.Ferreira, R.J.Liotta.  
Physical Review **C 37** (1988) 876.
52. Nuclear Stratosphere formation and its effects upon statistical particle emission processes.  
G.Batko, O.Civitarese.  
Physical Review **C 37** (1988) 2647.
53. Temperature dependent shell effects in  $^{16}O$  and  $^{40}Ca$  with a realistic effective hamiltonian.

- G.Bozzolo, O.Civitarese, J.P.Vary.  
Physical Review **C 37** (1988) 1240
54. Shell model and QRPA treatments of double beta decay.  
J.Engel, P.Vogel, O.Civitarese, M,Zirnbauer.  
Physics Letters **B 208** (1988) 187.
  55. Symmetry restoring treatment of the pairing hamiltonian in the quasi-particle representation.  
O.Civitarese, M.C.Licciardo.  
Physical Review **C 38** (1988) 967.
  56. Comparison of effective hamiltonians in symmetry restoring methods:intrinsic collective excitations in deformed nuclei.  
O.Civitarese, M.C.Licciardo.  
Physical Review **C 39**(1989) 1550.
  57. Linear response treatment of nuclear excitations at finite temperature.  
F.Alasia, O.Civitarese, M.Reboiro.  
Physical Review**C 39**(1989) 1012.
  58. On the formation of a nuclear stratosphere at finite temperature.  
O.Civitarese, G.Bozzolo, J.P.Vary.  
Physics Letters **B 219** (1989) 161.
  59. Identification of projectile sequential decay and transfer reemission reaction channels in the  $^{16}O + ^{27}Al$  systems at 4-5 MeV/A.  
N.C.Filho, N.Added, R.Anjos, M.Coimbra, L.Fonte, M.Figueira,  
D.Gimaraes, E.M.Szanto, A.Szanto de Toledo, O.Civitarese.  
Physical Review **C 40** (1989) 91.
  60. Universality of temperature dependent effects in many-fermion systems.  
O.Civitarese, G.G.Dussel, A.Zuker.  
Physical Review **C 40** (1989) 2900.
  61. Comparison between effective Hamiltonians in symmetry restoring theories: intrinsic excitations in superfluid nuclei.  
O.Civitarese and M.C.Licciardo.  
Physical Review **C 41** (1990) 1778.

62. Renormalized particle-particle and particle-hole RPA correlations at finite temperature: effects upon the nuclear level density parameter, O.Civitarese, A.G.Dumrauf and M.Reboiro  
Physical Review **C 41** (1990) 1785.
63. Structure of symmetry restoring interactions: modified BCS plus rotational approach for a schematic mode space.  
O.Civitarese and M.C.Licciardo  
Zeitschrift fur Physik **A 335** (1990) 279.
64. Finite temperature random phase approximation with the inclusion of scattering terms.  
F.Alasia, O.Civitarese  
Physical Review **C 42** ( 1990) 1335 .
65. Ground state correlations in the BCS treatment of a monopole pairing Hamiltonian.  
O.Civitarese, A.L.De Paoli.  
Zeitschrift fur Physik **A 337** (1990)377.
66. Suppression of the two neutrino double beta decay:particle number projected results.  
O.Civitarese, A.Faessler, J.Suhonen, X.R.Wu  
Physics Letters **B 251** (1990) 333.
67. Quadrupole pairing effects upon the structure of low-lying 2+ states in Zn isotopes.  
O.Civitarese, O.A.Rosso.  
Zeitschrift fur Physik **A 338** (1991) 389.
68. Suppression of the two neutrino double beta decay in a particle number projected quasiparticle random phase approximation.  
O.Civitarese, A.Faessler, J.Suhonen, X.R.Wu  
Nuclear Physics **A 524** (1991) 404.
69. Effect of pairing on breathing mode and nuclear matter compressibility.  
O.Civitarese, A.G.Dumrauf, M.Reboiro ,P.Ring, M.M.Sharma  
Physical Review **C 43** (1991) 2622.

70. Nuclear structure calculation of the two neutrino double beta decay transition  $^{100}\text{Mo} \rightarrow ^{100}\text{Ru}$   
O.Civitarese, A.Faessler, J.Suhonen, X.R.Wu  
Journal of Physics **G 17** (1991) 943.
71. Single  $\beta^+$  decay in  $^{26}\text{Mg}$  : a comparison between shell model and quasiparticle random phase approximation.  
O.Civitarese, H.Muther, L.D.Skouras and A.Faessler  
Journal of Physics **G 17** (1991) 1363.
72. Differential cross sections for DCX reactions on  $^{76}\text{Ge}, ^{128,130}\text{Te}$  in a particle number projected BCS + QRPA approach.  
O.Civitarese, A.Faessler and W.K.Kaminski  
Journal of Physics **G 17** (1991) 1407.
73. Pair density fluctuations in a number projected BCS approximation.  
O.Civitarese, A.Faessler and M.C.Licciardo  
Zeitschrift fur Physik **A 341** (1992) 261.
74. Description of the  $0^+ \rightarrow 0^+$  neutrinoless double beta decay transition in  $^{76}\text{Ge}$ : particle number projected quasiparticle random phase approximation.  
J.Suhonen, O.Civitarese and A.Faessler.  
Nuclear Physics **A 543** (1992) 645.
75. Symmetry breaking of the Galilean invariance in superfluid nuclei and its connection with quadrupole pairing interactions  
O.Civitarese, A.Faessler and M.C.Licciardo  
Nuclear Physics **A 542** (1992) 221.
76. Calculation of the beta decay of  $^{114-120}\text{Pd}$ : quasiparticle random phase approximation results  
J.Suhonen and O.Civitarese  
Physics Letters **B 280** (1992) 191.
77. Particle-vibration coupling in a basis with resonant states  
O.Civitarese, A.G.Dumrauf and R.J.Liotta  
Physical Review **C 47** (1993) 1060 .

78. Thermo Field Dynamics in the treatment of the nuclear pairing problem at finite temperature.  
O. Civitarese and A. L. De Paoli  
Zeitschrift fur Physik **A 344** (1993) 243
79. On the use of summation methods in nuclear double beta decay processes  
O.Civitarese, J.Suhonen  
Physical Review **C 47** (1993) 2410
80. Effects due to temperature dependent nuclear binding energies on the equation of state for hot nuclear matter.  
O.G.Benvenuto,O.Civitarese and M.Reboiro  
Physical Review **C 47** (1993) 1981
81. Two neutrino double beta decay to excited states: the  $0+$  to  $2+$  decay of  $^{136}\text{Xe}$ .  
J. Suhonen and O. Civitarese  
Physics Letters **B 308** (1993) 212.
82. Estimation of bounds for left-right mixing from nuclear double beta decay processes.  
J. Suhonen and O. Civitarese  
Physics Letters **B 312** (1993) 367.
83. Study of the muon violating conversion in a nucleus by using QRPA  
T. S. Kosmas, J. D. Vergados, O. Civitarese and A. Faessler  
Nuclear Physics **A 570** (1994) 637.
84. Theoretical bounds for majoron emission from nuclear double beta decay processes  
J. Suhonen and O. Civitarese  
Journal Physics **G 20** (1994) 347.
85. Double beta decay in the pseudo SU(3) scheme  
O. Castaños, J. G. Hirsch, O. Civitarese and P. O. Hess  
Nuclear Physics **A 571** (1994) 276

86. Pseudo SU(3) approach to double beta decay  
J.Hirsch, O. Castaños, P.O. Hess and O. Civitarese  
Progress in Particle and Nuclear Physics **32** (1994) 333.
87. The linear  $\sigma - \omega$  model in the Thermo Field Dynamics  
R.Aguirre,O.Civitarese and A.L.De Paoli.  
Nuclear Physics **A 579** (1994) 573.
88. Specific heat and shape transitions in light s-d nuclei.  
O.Civitarese and M.Schvellinger  
Physical Review **C 49** (1994) 1976.
89. QRPA analysis of the double beta decay of  $^{100}Mo$  to the ground state  
and excited states of  $^{100}Ru$   
J.Suhonen and O.Civitarese  
Physical Review **C 49** (1994) 3055
90. Two neutrino double beta decay to excited one and two phonon states  
O.Civitarese and J. Suhonen  
Nuclear Physics **A 575** (1994) 251.
91. Perturbative treatment of the two-neutrino double beta decay to ex-  
cited quadrupole states  
O.Civitarese and J. Suhonen  
Nuclear Physics **A 578** (1994) 62.
92. Schematic study of perturbative effects on the two neutrino double beta  
decay to excited states  
O.Civitarese and J. Suhonen  
Journal Physics **G 20** (1994) 1441.
93. Correspondence between thermal dual transformations and gauge fields  
O.Civitarese, A.L.De Paoli and M.C.Rocca  
Physics Letters **B 336** (1994) 275.
94. The nuclear level density parameter and nuclear structure effects at  
finite temperature.  
O. Civitarese and M. Schvellinger  
Journal of Physics **G 20**(1994) 1933

95. Systematic QRPA study of beta(-) and beta(+),EC decay transitions to excited states of Cd and Sn  
J. Suhonen and O. Civitarese  
Nuclear Physics **A 584** (1995) 449.
96. Study of the correspondence between dual thermal transformations and gauge fields.  
O. Civitarese, A. L. De Paoli and M. C. Rocca  
Nuclear Physics **A 588**(1995) 847.
97. Double beta decay to excited states of  $^{150}\text{Nd}$ .  
J. Hirsch, O. Castaños, P. Hess, O. Civitarese  
Nuclear Physics **A 589**(1995) 445.
98. Suppression of  $2\nu\beta\beta$  matrix elements by the competition of spin-flip and non-spin-flip like excitations  
O. Civitarese, J. Suhonen and A. Faessler  
Nuclear Physics **A 591** (1995)195.
99. Double beta decay of  $^{100}\text{Mo}$ : the deformed limit  
J.G.Hirsch, O. Castaños, P. Hess, O. Civitarese  
Physical Review **C 51** (1995) 2252.
100. The Zimanyi and Moszkowski Model in the Thermo Field Dynamics  
R.Aguirre,O.Civitarese and A.L.De Paoli.  
Nuclear Physics **A 597** (1996) 543.
101.  $2\nu\beta\beta$  matrix elements and the competition between spin flip and non spin flip channels in realistic calculations:  
R. Aunola , O. Civitarese, J. Kauhanen and J. Suhonen  
Nuclear Physics **A 596** (1996) 187.
102. Feeding of hole states induced by the proton decay of the GT and IAS resonances  
J. Blomqvist, O. Civitarese, E. Kirchuk, R. J. Liotta, T. Vertse  
Physical Review **C 53** (1996) 2001.
103. Gamow States as Continuous Linear functionals over Analytical Test Functions.

- C. G. Bollini, O. Civitarese, A. L. De Paoli and M. C. Rocca  
Journal of Mathematical Physics **37** (1996) 4235.
104. Physical Representation of Gamow States in a Rigged Hilbert Space.  
C. G. Bollini, O. Civitarese, A. L. De Paoli and M. C. Rocca  
Physics Letters **B 382** (1996)205.
105. Contributions of Unique First-Forbidden Transitions to Two-Neutrino  
Double Beta Decay Half-Lives  
O. Civitarese and J. Suhonen  
Nuclear Physics **A 607** (1996) 152.
106. Renormalized pnQRPA and double beta decay: a critical analysis  
J. Hirsch, P. Hess and O. Civitarese  
Physical Review **C 54** (1996) 1976.
107. Temperature dependence of the nuclear binding energy, effects on the  
EOS for hot nuclear matter using different models  
O. G. Benvenuto, O. Civitarese and M. Reboiro  
Physica Scripta **55** (1997) 550
108. Double beta decay and proton neutron interactions.  
J. Hirsch, P. Hess and O. Civitarese  
Physics Letters **B 390**(1997) 36.
109. Effects due to the continuum on shell corrections at finite temperatures.  
N. Sandulescu, O. Civitarese, R. J. Liotta, T. Vertse  
Physical Review **C 55** (1997) 1250.
110. Single and Double beta decay Fermi transitions in an exactly solvable  
model.  
J. Hirsch, P. Hess and O. Civitarese  
Physical Review **C 56** (1997) 199.
111. Proton-Neutron pairing effects in medium and heavy mass nuclei.  
O. Civitarese and M. Reboiro  
Physical Review **C 56** (1997) 1179.



112. Neutron-Proton pairing BCS approach.  
O. Civitarese, M. Reboiro and P. Vogel.  
Physical Review **C 56** (1997) 1840.
113. The collapse of the proton-neutron QRPA as a signal of phase instabilities .  
O. Civitarese, P. Hess and J. Hirsch  
Physics Letters **B 412** (1997) 1.
114. Weak Interaction and Nuclear Structure aspects of Double Beta Decay.  
J. Suhonen and O. Civitarese.  
Physics Reports **300** (1998) 123.
115. Comparative study of the validity of the renormalized random phase approximation.  
O. Civitarese and M. Reboiro  
Physical Review **C 57** (1998) 3062.
116. Exactly solvable fermion-boson mapping representations.  
O. Civitarese and M. Reboiro  
Physical Review **C 57** (1998) 3055.
117. Electron Capture Decay of  $^{116}\text{In}$  and nuclear structure of double beta decay  
M. Bhattacharya, A. Garcia, M. Hindi, E. B. Norman, C. Ortiz, N. Kaloskamis, C. N. Davids, O. Civitarese and J. Suhonen  
Physical Review **C 58**(1998) 1247.
118. Is the single state dominance realized in double beta decay transitions ?  
O. Civitarese and J. Suhonen  
Physical Review **C 58** (1998) 1535.
119. Fermion-boson interactions in a solvable model.  
O. Civitarese, y M. Reboiro.  
Physical Review **C 58** (1998) 2787.
120. Resonant States in the Thermo Field Dynamics.  
O.Civitarese, A.L.De Paoli and M.C.Rocca.  
Nuclear Physics **A 642** (1998) 531.

121. Nuclear Structure and Double Beta Decay.  
O. Civitarese.  
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