

☐ : Roberto Senesi

PUBBLICAZIONI SU RIVISTE INTERNAZIONALI CON REFEREE

78. **R. Senesi\***, D. Flammini, G. Romanelli, C. Andreani, "From neutron Compton profiles to momentum distribution: assessment of direct numerical determination", *Nuclear Instruments and Methods A* **704**,36-39 ( 2013) (\* **corresponding author**).
77. S. Bobone, Y. Gerelli, M. De Zotti, G. Bocchinfuso, A. Farrotti, B. Orioni, F. Sebastiani, E. Latter, J. Penfold, **R. Senesi**, F. Formaggio, A. Palleschi, C. Toniolo, G. Fragneto, L. Stella, "Membrane thickness and the mechanism of action of the short peptaibol trichogin GA IV", *Biochimica et Biophysica Acta-Biomembranes* **1828**,1013-1024 ( 2013).
76. S. Bobone, Y. Gerelli, M. De Zotti, G. Bocchinfuso, B. Orioni, A. Palleschi, F. Sebastiani, E. Latter, J. Penfold, **R. Senesi**, F. Formaggio, C. Toniolo, G. Fragneto, L. Stella, " Membrane thickness and the mechanism of action of the short peptaibol trichogin GA IV" . *Journal of Peptide Science*, **18**, p. S25-S26 (2012) ISSN: 1075-2617, doi: 10.1002/psc.2447.
75. **R. Senesi**, "Direct kinetic energy extraction from Neutron Compton profiles", *Nuclear Instruments and Methods A* **661**, 70-76 (2012).
74. D. Flammini, A. Pietropaolo, **R. Senesi \***, C. Andreani, F. Mc Bride, A. Hodgson, M. A. Adams, L. Lin, R. Car, "Spherical momentum distribution of the protons in hexagonal ice from modeling of inelastic neutron scattering data ", *Journal of Chemical Physics* **84**, 024504 (2012); doi:10.1063/1.3675838 (\* **corresponding author**).
73. C. Andreani, D. Colognesi, A. Pietropaolo, **R. Senesi**, "Ground state proton dynamics in stable phases of water" *Chemical Physics Letters -Frontiers article* **518**, 1-6 (2011). , **Impact Factor=2.337, Impact Factor Integrato=186.715**.
72. A. Pietropaolo, **R. Senesi**, "Electron Volt Neutron Spectrometers", *Physics Reports* **508**, 45-90 (2011) , **Impact Factor=20.394, Impact Factor Integrato=184.378**.
71. J. Mayers, N. I. Gidopoulos, M. A. Adams, G. Reiter., C. Andreani and **R.Senesi**, Comment on "High energy neutron scattering from hydrogen using a direct geometry spectrometer", *Physical Review B* **84**, 056301 (2011). , **Impact Factor=3.691, Impact Factor Integrato=163.984**.
70. Claudia Pantalei, **Roberto Senesi**, Carla Andreani, Piero Sozzani, Angiolina Comotti, Silvia Bracco, Mauro Beretta, Paul E. Sokol, and George Reiter, "Interaction of single water molecules with silanols in meso- porous silica", *Physical Chemistry Chemical Physics* **13**, 6022 (2011). , **Impact Factor=3.573, Impact Factor Integrato=156.960**.

69. Marco Alessandrini, Anna Paradowska, Enrico Perelli Cippo, **Roberto Senesi**, Carla Andreani, P. Montedoro, F. Chiti, D. Sala, D. Spinelli, "Investigation of Residual Stress Distribution of a Wheel Rims using Neutron Diffraction", *Materials Science Forum* **681**, 522 (2011). **Censito da SCOPUS, non da ISI.**
68. G. Festa, **R. Senesi**, M. Alessandrini, C. Andreani, G. Vitali, S. Porcinai, A. M. Giusti, T. Materna, A.M. Paradowska, "Non destructive neutron diffraction measurements of cavities, inhomogeneities and residual strain in bronzes of Ghiberti's relief from the Gates of Paradise", *Journal of Applied Physics* **109**, 064908 (2011). , **Impact Factor=2.160, Impact Factor Integrato=153.387.**
67. G. F. Reiter, **R. Senesi**, and J. Mayers, "Changes in the zero point energy of the protons as the source of the binding energy of water to A phase DNA", *Physical Review Letters* **105**, 148101 (2010), **Impact Factor=7.621, Impact Factor Integrato=151.227.**
66. A. Pietropaolo, **R. Senesi**, C. Andreani, A. Botti, M. A. Ricci, F. Bruni, Reply to Comment on "Excess of proton mean kinetic energy in supercooled water", *Physical Review Letters* **103**, 069802 (2009), **Impact Factor=7.320, Impact Factor Integrato=143.606.**
65. A. Pietropaolo, E. Perelli Cippo, G. Gorini, M. Tardocchi, E. M. Schooneveld, C. Andreani, **R. Senesi**, 'γ-ray background sources in the VESUVIO spectrometer at ISIS spallation neutron source', *Nuclear Instruments and Methods A* **608**, 121-124 (2009), **Impact Factor=1.317, Impact Factor Integrato=136.286.**
64. R. Bedogni, A. Esposito, C. Andreani, **R. Senesi** \*, M. P. De Pascale, P. Picozza, A. Pietropaolo, G. Gorini, C. D. Frost, S. Ansell, "Characterization of the neutron field at the ISIS-Vesuvio facility by means of a Bonner sphere spectrometer", *Nuclear Instruments and Methods A* **612**, 143-148 (2009) (\* **corresponding author**), **Impact Factor=1.317, Impact Factor Integrato=134.969.**
63. G. Festa, C. Andreani, M. P. De Pascale, **R. Senesi**, G. Vitali S. Porcinai, A. M. Giusti R. Schulze, L. Canella, P. Kudejova, M. Mühlbauer, B. Schillinger and the Ancient Charm Collaboration, "A non destructive stratigraphic and radiographic neutron study of Lorenzo Ghiberti's reliefs from Paradise and North doors of Florence Baptistery", *Journal of Applied Physics* **106**, 074909 (2009), **Impact Factor=2.072, Impact Factor Integrato=133.652.**
62. A. Pietropaolo, **R. Senesi**\*, C. Andreani, J. Mayers, "Quantum effects in water: proton kinetic energy maxima in stable and supercooled liquid" , *Brazilian Journal of Physics* **39**, 318-321 (2009), (\* **corresponding author**) **Impact Factor=0.575, Impact Factor Integrato=131.580.**
61. S. E. Pagnotta, F. Bruni, **R. Senesi**, A. Pietropaolo, "Quantum behavior of water protons in protein hydration shell", *Biophysical Journal* **96**, 1939-1943 (2009), **Impact Factor=4.390, Impact Factor Integrato=131.005.**

60. D. Colognesi, A. Pietropaolo, and **R. Senesi**, "Role of the electronic degrees of freedom in neutron Compton scattering from molecular systems", *Journal of Physics: Condensed Matter* **20**, 4455225 (2008), **Impact Factor=1.900, Impact Factor Integrato=126.615.**
59. **R. Senesi\***, A. Pietropaolo, C. Andreani, "Constant- $q$  data representation in Neutron Compton scattering on the VESUVIO spectrometer", *Nuclear Instruments and Methods A*, **594**, 244 (2008), (\* **corresponding author**), **Impact Factor=1.019, Impact Factor Integrato=124.715.**
58. E. Perelli Cippo, G. Gorini, M. Tardocchi, C. Andreani, A. Pietropaolo, **R. Senesi**, N. Rhodes, E. Schoonveld, "Advances on detectors for low-angle scattering of epithermal neutrons", *Measurement Science and Technology* **19**, 047001 (2008), **Impact Factor=1.493, Impact Factor Integrato=123.696 .**
57. E. Perelli Cippo, G. Gorini, M. Tardocchi, C. Andreani, A. Pietropaolo, **R. Senesi**, N. Rhodes, E. Schoonveld, "The Very Low Angle Detector for High-energy Inelastic Neutron Scattering on the VESUVIO spectrometer", *Nuclear Instruments and Methods A*, **589**, 296 (2008), **Impact Factor=1.019, Impact Factor Integrato=122.203.**
56. A. Pietropaolo, **R. Senesi**, C. Andreani, A. Botti, M. A. Ricci, F. Bruni, "Excess of proton mean kinetic energy in supercooled water", *Physical Review Letters* **100**, 127802 (2008) **Impact Factor=7.180, Impact Factor Integrato=121.184.**
55. C. Pantalei, A. Pietropaolo, **R. Senesi**, C. Andreani, S. Imberti, J. Mayers, C. Burnham, and G. Reiter, "Proton momentum distribution of liquid water from room temperature to the supercritical phase", *Physical Review Letters*, **100**, 177801 (2008), selected for *Virtual Journal of Biological Physics Research* **15**, issue 10 (2008) **Impact Factor=7.180, Impact Factor Integrato=114.004.**
54. A. Pietropaolo, **R. Senesi**, "Deep inelastic neutron scattering measurements on  $^{207}\text{Pb}$  and  $\text{NaHF}_2$  as a test of a detectors array on the VESUVIO spectrometer", *Nuclear Instruments and Methods A* **584**, 377 (2008), **Impact Factor=1.019, Impact Factor Integrato=106.824.**
53. D. Colognesi, A. Pietropaolo, **R. Senesi**, A. J. Ramirez-Cuesta, "Neutron-Compton scattering as a molecular characterization technique: a study on  $\text{NaHF}_2$ ", *Physical Review B* **76**, 174206 (2007), **Impact Factor=3.172, Impact Factor Integrato=108.805.**
52. A. Botti, F. Bruni, M. A. Ricci, A. Pietropaolo, **R. Senesi**, C. Andreani, "Structure and single proton dynamics of bulk supercooled water", *Journal of Molecular Liquids* **136**, 236 (2007), **Impact Factor=0.982, Impact Factor Integrato=102.633 .**
51. V. Garbuio, C. Andreani, S. Imberti, A. Pietropaolo, G. F. Reiter, **R. Senesi\***, M. A. Ricci, "Proton quantum coherence observed in Water confined in silica

- nanopores", *Journal of Chemical Physics* **127**, 154501 (2007), (\* **corresponding author**) selected for *Virtual Journal of Nanoscale Science and Technology* **16**, Issue 18, **Impact Factor=3.044, Impact Factor Integrato=101.651** .
50. **R. Senesi**, A. Pietropaolo, A. Bocedi, S. E. Pagnotta, F. Bruni, "Proton Momentum distribution in a protein hydration shell", *Physical Review Letters* **98**, 138102 (2007), selezionato per *Virtual Journal of Biological Physics Research* **13**, issue 7 (2007)**Impact Factor=6.944, Impact Factor Integrato=98.607**.
49. C. Andreani, C. Pantalei, **R. Senesi**, "<sup>4</sup>He adsorbed in cylindrical silica nanopores: Effect of size on the single-atom mean kinetic energy", *Physical Review B* **75**, 064515 (2007), **Impact Factor=3.172, Impact Factor Integrato=91.663** .
48. G. Gorini for the Ancient Charm collaboration, "Ancient Charm: a research project for neutron-based investigation of cultural heritage objects", *Il Nuovo Cimento C*, **030**, 47, DOI 10.1393/ncc/i2006-10035-9 (2007) .
47. A. Pietropaolo, C. Andreani, A. Filabozzi, E. Pace, **R. Senesi**, "Resolution function in Deep Inelastic Neutron Scattering using the Foil Cycling Technique", *Nuclear Instruments and Methods A* **570**, 498 (2007), **Impact Factor=1.114, Impact Factor Integrato=88.491**.
46. A. Pietropaolo, M. Tardocchi, E. M. Schooneveld, **R. Senesi**, "Characterization of the  $\gamma$  background in epithermal neutron scattering measurements at pulsed neutron sources", *Nuclear Instruments and Methods A* **568**, 826 (2006), **Impact Factor=1.185, Impact Factor Integrato=87.377**.
45. E. M. Schooneveld, A. Pietropaolo, C. Andreani, G. Gorini, J. Mayers, N. J. Rhodes, **R. Senesi**, M. Tardocchi, "The Foil Cycling Technique for the VESUVIO spectrometer operating in the Resonance Detector configuration", *Review of Scientific Instruments* **77**, 095103 (2006), **Impact Factor=1.541, Impact Factor Integrato=86.192**.
44. M. Tardocchi, G. Gorini, E. Perelli-Cippo, C. Andreani, S. Imberti, A. Pietropaolo, **R. Senesi**, N. J. Rhodes, E. Schooneveld, "VLAD for epithermal neutron scattering experiments at large energy transfers", *Journal of Physics: Conference Series* **41**, 451 (2006).
43. A. Filabozzi, C. Andreani, M. P. De Pascale, G. Gorini, A. Pietropaolo, E. Perelli Cippo, **R. Senesi**, M. Tardocchi, W. Kockelmann, "Texture and structure studies on marbles from Villa Adriana via neutron diffraction technique", *Journal of Neutron Research* **14**, 55 (2006) .
42. E. Perelli-Cippo, G. Gorini, M. Tardocchi, C. Andreani, A. Pietropaolo, **R. Senesi**, N. J. Rhodes, E. Schooneveld, "The OH stretching band in ice Ih derived via eV neutron spectroscopy on VESUVIO using the new very low angle detector bank", *Applied Physics A* **83**, 453 (2006), **Impact Factor=1.739, Impact Factor Integrato=84.651**.

41. M. Tardocchi, C. Andreani, O. Cremonesi, G. Gorini, E. Perelli-Cippo, A. Pietropaolo, N. Rhodes, E. M. Schooneveld, **R. Senesi**, "Development of the Very Low Angle Detector (VLAD) for detection of epithermal neutrons at low momentum transfers", *Nuclear Physics B-Proceedings* **150**, 421 (2006).
40. M. Tardocchi, A. Pietropaolo, C. Andreani, G. Gorini, S. Imberti, E. Perelli-Cippo, **R. Senesi**, N. Rhodes, E. M. Schooneveld, "Comparison of Cadmium-Zinc-Telluride semiconductor and Yttrium-Aluminum-Perovskite scintillator as photon detectors for epithermal neutron spectroscopy", *Nuclear Instruments and Methods A* **567**, 337 (2006), **Impact Factor=1.185, Impact Factor Integrato=82.912.**
39. A. Pietropaolo, C. Andreani, A. Filabozzi, **R. Senesi**, G. Gorini, E. Perelli Cippo, M. Tardocchi, N. J. Rhodes and E. M. Schooneveld, "DINS measurements on VESUVIO in the Resonant Detector configuration: proton mean kinetic energy of water", *Journal of Instrumentation* **1**, P04001 (2006), **Impact Factor=2.102, Impact Factor Integrato=81.727.**
38. C. Andreani, C. Pantalei, **R. Senesi**, "Mean kinetic energy of helium atoms in fluid  $^3\text{He}$  and  $^3\text{He}$ - $^4\text{He}$  mixtures", *Journal of Physics: Condensed Matter* **18**, 5587 (2006), **Impact Factor=2.038, Impact Factor Integrato=79.625.**
37. E. Perelli-Cippo, C. Andreani, M. Casalboni, S. Dirè, D. Fernández-Cañoto, G. Gorini, S. Imberti, A. Pietropaolo, P. Proposito, S. Schutzmann, **R. Senesi**, M. Tardocchi, "Investigation of High Energy Inelastic Neutron Scattering from liquid water confined in silica xerogel", *Physica B* **385-386**, 1095 (2006) **Impact Factor=0.872, Impact Factor Integrato=77.587.**
36. A. Cunsolo, D. Colognesi, M. Sampoli, **R. Senesi**, R. Verbeni, "Signatures of quantum behaviour in the microscopic dynamics of liquid hydrogen and deuterium", *Journal of Chemical Physics* **123**, 114509 (2005), **Impact Factor=3.138, Impact Factor Integrato=76.715.**
35. **R. Senesi\***, D. Colognesi, A. Pietropaolo, T. Abdul-Redah, "Deep inelastic neutron scattering from orthorhombic ordered HCl: short-time proton dynamics and anomalous neutron cross-sections", *Physical Review B* **72**, 054119 (2005), (\* **corresponding author**), **Impact Factor=3.185, Impact Factor Integrato=73.577.**
34. S. Imberti, C. Andreani, V. Garbuio, G. Gorini, A. Pietropaolo, **R. Senesi** and M. Tardocchi, "Resolution of the VESUVIO spectrometer for High energy Inelastic Neutron Scattering experiments", *Nuclear Instruments and Methods A* **552**, 463 (2005), **Impact Factor=1.224, Impact Factor Integrato=70.392 .**
33. C. Andreani, D. Colognesi, J. Mayers, G. F. Reiter, **R. Senesi**, "Measurement of Momentum Distribution of Light Atoms and Molecules in Condensed Matter Systems Using Inelastic Neutron Scattering", *Advances in Physics* **54**, 377 (2005) **Impact Factor=10.421, Impact Factor Integrato=69.168.**

32. E. Perelli-Cippo, G. Gorini, O. Cremonesi, M. Tardocchi, C. Andreani, A. Pietropaolo, **R.Senesi**, N. Rhodes, E. M. Schooneveld, "Development of the Very Low Angle Detector for epithermal neutron scattering at low momentum transfers", *IEEE Transactions on Nuclear Science* **52**, 1092 (2005), **Impact Factor=1.259**, **Impact Factor Integrato=58.747**.
31. M. Tardocchi, A. Pietropaolo, C. Andreani, G. Gorini, E. Perelli-Cippo, N. Rhodes, E. M. Schooneveld, **R.Senesi**, "Development of new instrumentation for epithermal neutron scattering at very low angles", *Nuclear Instruments and Methods A* **535**, 121 (2004), **Impact Factor=1.224**, **Impact Factor Integrato=57.488**.
30. M. Tardocchi, A. Pietropaolo, C. Andreani, G. Gorini, N. Rhodes, E. M. Schooneveld, **R.Senesi**, "YAP scintillators for resonant detection of epithermal neutrons at pulsed neutron sources", *Review of Scientific Instruments* **75**, 4880 (2004), **Impact Factor=1.541**, **Impact Factor Integrato=56.264**.
29. C. Andreani, G. Gorini, E. Perelli-Cippo, A. Pietropaolo, N. Rhodes, E. M. Schooneveld, **R.Senesi**, M. Tardocchi, "A resonant detector for high-energy inelastic neutron scattering experiments", *Applied Physics Letters* **75**, 5454 (2004) **Impact Factor=4.127**, **Impact Factor Integrato=54.723**.
28. C. Andreani, A. D'Angelo, G. Gorini, S. Imberti, A. Pietropaolo, N. J. Rhodes, E. M. Schooneveld, **R. Senesi**, M. Tardocchi, "CdZnTe  $\gamma$  detector for Deep Inelastic Neutron Scattering on the VESUVIO spectrometer.", *Applied Physics A* **78**, 903 (2004), DOI 10.1007/s00339-003-2087-71, **Impact Factor=1.595**, **Impact Factor Integrato=50.596**.
27. G. Gorini, E. Perelli-Cippo, M. Tardocchi, C. Andreani, A. D'Angelo, A. Pietropaolo, **R.Senesi**, S. Imberti, A. Bracco, E. Previtali, G. Pessina, N. J. Rhodes, E. M. Schooneveld, "The resonant detector and its application to epithermal neutron spectroscopy", *Nuclear Instruments and Methods A* **529**, 293 (2004), **Impact Factor=1.224**, **Impact Factor Integrato=49.001**.
26. M. Tardocchi, A. Pietropaolo, **R. Senesi**, C. Andreani, G. Gorini, "Development of resonant detectors for epithermal neutron spectroscopy at pulsed neutron sources", *Nuclear Instruments and Methods A* **518/1-2**, 259 (2004), **Impact Factor=1.224**, **Impact Factor Integrato=47.777**.
25. M. Tardocchi, A. Pietropaolo, C. Andreani, A. Bracco, A. D'Angelo, G. Gorini, S. Imberti, N. J. Rhodes, **R. Senesi**, E. M. Schooneveld, "Cadmium-Zinc-Telluride photon detector for epithermal neutron spectroscopy: pulse height response characterization", *Nuclear Instruments and Methods A* **526**, 477 (2004), **Impact Factor=1.224**, **Impact Factor Integrato=46.553**.
24. T. Abdul-Redah, C. Andreani, A. D'Angelo, G. Gorini, S. Imberti, J. Mayers, R. J. Newport, A. Pietropaolo, N. J. Rhodes, E. M. Schooneveld, **R. Senesi**, M. Tardocchi, J. Tomkinson, "Recent developments of the eVerdi Project at ISIS", *Physica B* **350**, e837 (2004) **Impact Factor=1.056**, **Impact Factor Integrato=45.329**.

23. D. Colognesi, M. J. Ramirez-Cuesta, M. Zoppi, **R. Senesi**, and T. Abdul-Redah, "Extraction of the density of phonon states in LiH and NaH", *Physica B* **350**, e983 (2004) **Impact Factor=1.056, Impact Factor Integrato=44.273**.
22. M.Tardocchi, C.Arnaboldi, G.Gorini, S.Imberti, G.Pessina, E.Previtali, C. Andreani, A.Pietropaolo, **R. Senesi**, "Assessment of a silicon detector for pulsed neutron scattering experiments", *Physica B* **350**, e853 (2004) **Impact Factor=1.056, Impact Factor Integrato=43.217**.
21. J. Mayers , J. Tomkinson , T. Abdul-Redah , W.G. Stirling , C. Andreani , **R. Senesi**, M. Nardone , D. Colognesi , E. Degiorgi, "VESUVIO - the double difference inverse geometry spectrometer at ISIS", *Physica B* **350**, e659 (2004), **Impact Factor=1.056, Impact Factor Integrato=42.161**.
20. A. Pietropaolo, C. Andreani, A. D'Angelo, G.Gorini, E. Perelli Cippo, S. Imberti, N. J. Rhodes, E. M. Schooneveld, **R. Senesi**, M. Tardocchi, "Photon detectors for epithermal neutron scattering at high- $\omega$  and low-q.", *Physica B* **350**, e857 (2004) **Impact Factor=1.056, Impact Factor Integrato=41.105**.
19. **R. Senesi\***, C. Andreani, A. L. Fielding, J. Mayers, W. G. Stirling, "Kinetic energy of He atoms in liquid  $^4\text{He}$ - $^3\text{He}$  mixtures", *Physical Review B* **68**, 214522 (2003), (\* **corresponding author**), **Impact Factor=3.475, Impact Factor Integrato=40.049** .
18. A. Pietropaolo, C. Andreani, A. D'Angelo, G.Gorini, S. Imberti, N. J. Rhodes, E. M. Schooneveld, **R. Senesi**, M. Tardocchi, "The resonance detector spectrometer for neutron spectroscopy in the eV energy region", in *Capture Gamma-Ray Spectroscopy And Related Topics, Proceedings of the Eleventh International Symposium*, J. Kvasil, P. Cejnar and M. Krlicka eds., pag. 555 World Scientific (2003).
17. C. Andreani, D. Colognesi, E. Degiorgi, A. Filabozzi, M. Nardone, E. Pace, A. Pietropaolo, **R. Senesi**, "Double difference method in Deep Inelastic Neutron Scattering on the VESUVIO spectrometer", *Nuclear Instruments and Methods*, **A497**, 535 (2003), **Impact Factor=1.224, Impact Factor Integrato=36.574**.
16. A. Botti, F. Bruni, A. Isopo, G. Modesti, C. Oliva, **R. Senesi**, A. K. Soper and M. A. Ricci, " Water structure in supercritical mixtures of water and rare gases ", *Journal of Chemical Physics* **118**, 235 (2003), **Impact Factor=3.093, Impact Factor Integrato=35.350**.
15. A. Cunsolo, G. Pratesi, D. Colognesi, R. Verbeni, M. Sampoli, F. Sette, G. Ruocco, **R. Senesi**, M. Krisch and M. Nardone, "Microscopic structure and collective modes in liquid hydrogen and deuterium: an IXS study", *Journal of Low Temperature Physics* **129**, 117 (2002), **Impact Factor=1.074, Impact Factor Integrato=32.257**.

14. A. Pietropaolo, C. Andreani, A. D'Angelo, **R. Senesi**, G. Gorini, S. Imberti, M. Tardocchi, N. J. Rhodes, E. M. Schooneveld, "γ Detectors for Deep Inelastic Neutron Scattering in the 1-100 eV region", *Applied Physics A* **74**, S189 (2002), **Impact Factor=1.595, Impact Factor Integrato=31.183.**
13. J. Mayers, A. L. Fielding and **R. Senesi**, "Multiple scattering in Deep Inelastic Neutron Scattering: Monte Carlo simulations and experiments at the ISIS eVS inverse geometry spectrometer", *Nuclear Instruments and Methods A* **481**, 454 (2002) **Impact Factor=1.317, Impact Factor Integrato=29.588.**
12. **R. Senesi**, C. Andreani and D. Colognesi, "Momentum distribution of liquid <sup>3</sup>He: simulation of Deep Inelastic Neutron Scattering experiments with the VESUVIO spectrometer", *Journal of Low Temperature Physics* **126**, 57 (2002), **Impact Factor=1.074, Impact Factor Integrato=28.271.**
11. C. Andreani, A. Pietropaolo, **R. Senesi**, G. Gorini, M. Tardocchi, A. Bracco, N. Rhodes, E. Schoneweld, "Electron Volt spectroscopy at a pulsed neutron source using a resonance detector technique", *Nuclear Instruments and Methods A* **481**, 509 (2002), **Impact Factor=1.317, Impact Factor Integrato=27.197.**
10. **R. Senesi**, C. Andreani, D. Colognesi, A. Cunsolo, M. Nardone, "Deep Inelastic Neutron Scattering determination of the single particle kinetic energy in solid and liquid <sup>3</sup>He", *Physical Review Letters* **86**, 4584 (2001), **Impact Factor=6.94, Impact Factor Integrato=25.880.**
9. C. Andreani, E. Degiorgi, **R. Senesi**, F. Cillico, D. Colognesi, J. Mayers, M. Nardone, E. Pace, "Single particle dynamics in liquid and solid hydrogen sulphide: an inelastic neutron scattering study", *Journal of Chemical Physics* **114**, 387 (2001), **Impact Factor = 3.093, Impact Factor Integrato=18.940.**
8. D. Colognesi, C. Andreani, **R. Senesi**, "Single particle mean kinetic energy in low density supercritical <sup>4</sup>He", *Europhysics Letters* **50**, 202 (2000), **Impact Factor=2.893, Impact Factor Integrato=15.847.**
7. **R. Senesi\***, C. Andreani, Z. Bowden, D. Colognesi, E. Degiorgi, A. L. Fielding, J. Mayers, M. Nardone, J. Norris, M. Praitano, N. J. Rhodes, W. G. Stirling, J. Tomkinson, and C. Uden, "VESUVIO: a novel instrument for performing spectroscopic studies on condensed matter with eV neutrons at the ISIS facility", *Physica B* **276-278**, 200 (2000), (\* corresponding author), **Impact Factor=1.056, Impact Factor Integrato=12.954.**
6. E. Giorgetti, G. Margheri, S. Sottini, M. Casalbani, **R. Senesi**, E. Scarselli, R. Pizzoferrato, "Dye-doped Zirconia-based Ormosil planar waveguides: optical properties and surface morphologies", *Journal of Non-Crystalline Solids* **255**, 193 (1999) **Impact Factor=1.252, Impact Factor Integrato=11.898.**
5. M. Casalbani, R. D'Amato, I. Fratoddi, A. Furlani, R. Pizzoferrato, F. Sarcinelli, **R. Senesi**, A. Vannucci and M. Varasi, "Second Harmonic Generation in PMMA



- films doped with Organometallic Complexes”, *Radiation Effects and Defects in Solids* **150**, 237 (1999), **Impact Factor=0.554, Impact Factor Integrato=10.646.**
4. M. Casalboni, F. De Matteis, V. Ferone, P. Proposito, **R. Senesi**, R. Pizzoferrato, A. Bianco, A. De Mico, “DODCI molecules incorporated in sol-gel glasses: the interaction with the silica matrix”, *Chemical Physics Letters* **291**, 167 (1998), **Impact Factor=2.291, Impact Factor Integrato=10.092.**
  3. **R. Senesi**, M. Nardone, F.P.Ricci, M.A. Ricci and A.K. Soper, “Microscopic structure of the hydrogen-xenon mixture”, *Physical Review E* **56**, 2993 (1997), **Impact Factor=2.400, Impact Factor Integrato=7.801.**
  2. M. Casalboni, **R. Senesi**, P. Proposito, F. De Matteis and R. Pizzoferrato, “Rigid-cage effects on the optical properties of the dye 3,3' - diethyloxadicarbocyanine incorporated in silica-gel glasses”, *Applied Physics Letters* **70**, 2969 (1997)**Impact Factor=3.554, Impact Factor Integrato=5.401.**
  1. M.Casalboni, F. De Matteis, R. Francini, P. Proposito, **R. Senesi**, U. M. Grassano, R.Pizzoferrato, G. Gnappi, A. Montenero, “Optical properties of dye-doped sol-gel glasses”, *Journal of Luminescence* **72-74**, 475 (1997), **Impact Factor=1.847, Impact Factor Integrato=1.847.**

# Roberto Senesi    **ELENCO COMPLETO DELLE PUBBLICAZIONI**

06-72594549 - roberto.senesi@roma2.infn.it - <http://www.fisica.uniroma2.it>

---

⌋ : Roberto Senesi

## MONOGRAFIE

1. C. Andreani, G. Festa, A. Lapi, R. Senesi, "Quesiti e soluzioni di Fisica Generale", Exorma Edizioni, Roma (2010), ISBN: 978-88-95688-51-0

⌋    : Roberto Senesi

ALTRE PUBBLICAZIONI SU RIVISTE INTERNAZIONALI E TECHNICAL REPORT

13. R. Senesi and C. Vasi, "Scattering and Imaging with eV Neutrons: X School of Neutron Scattering Francesco Paolo Ricci", articolo **su INVITO**, *Notiziario Neutroni e Luce di Sincrotrone* **16**, 24 (2011).
12. D. Flammini, A. Pietropaolo, **R. Senesi**, C. Andreani, F. McBride, A. Hodgson, L. Lin, R. Car, M. Adams "Proton harmonic motion in ice", articolo **su INVITO**, ISIS Highlights, ISIS Facility Annual Report 2010, *Science and Tecnology Facilities Council Report- UK* (2010).
11. F. Bruni, S. E. Pagnotta, A. Pietropaolo, **R. Senesi**, "Water around proteins: the ultrafast motion of protons", articolo **su INVITO**, ISIS Highlights, ISIS Facility Annual Report 2008, *Science and Tecnology Facilities Council Report- UK* (2008).
10. C. Andreani, S. Imberti, A. Pietropaolo, **R. Senesi**, G. Gorini, E. Perelli Cippo, M. Tardocchi, T. Abdul-Redah, J. Mayers, N. J. Rhodes, E. M. Schooneveld, J. Tomkinson, "High Energy Inelastic Neutron Scattering on the VESUVIO spectrometer at ISIS", *Neutron News* **16**, 30 (2005).
9. **R. Senesi**, C. Andreani, D. Fernandez-Cañoto, V. Garbuio, G. Gorini, S. Imberti, E. Perelli Cippo, A. Pietropaolo, N. J. Rhodes, E. M. Schooneveld, M. Tardocchi, "Neutron spectroscopy of High Energy Excitations on the VESUVIO spectrometer", *ICANS-XVII Proceedings of the 17th Meeting of the international collaboration on advanced neutron sources -2005*, Los Alamos National Laboratory report, LA-UR 06-3904, Vol. III, p. 1009 (2006).
8. A. Pietropaolo, C. Andreani, D. Fernandez-Cañoto, V. Garbuio, G. Gorini, S. Imberti, E. Perelli Cippo, **R. Senesi**, M. Tardocchi, "Resolution in High energy Inelastic Neutron Scattering using the VESUVIO spectrometer", *ICANS-XVII Proceedings of the 17th Meeting of the international collaboration on advanced neutron sources -2005* (Los Alamos National Laboratory report, LA-UR 06-3904, Vol. III, p. 898 (2006).
7. C. Andreani, A. Pietropaolo, **R. Senesi**, G. Gorini, E. Perelli Cippo, M. Tardocchi, N. Rhodes, E. M. Schooneveld, "Density of states in ICE measured using the new VLAD detector technology", articolo **su INVITO** in Highlights of ISIS Science, The Rutherford Appleton Laboratory - ISIS Facility Annual Report 2004, *CCLRC Technical Report RAL-TR* (2004).
6. C. Andreani, A. Pietropaolo, **R. Senesi**, G. Gorini, M. Tardocchi, N. Rhodes, E. M. Schooneveld, "Condensed matter studies with 20-100 eV neutrons: effective detection systems for high inelastic neutron scattering and deep inelastic neutron scattering", articolo **su INVITO** in Highlights of ISIS Science, The Rutherford Appleton Laboratory - ISIS Facility Annual Report 2003, *CCLRC Technical Report RAL-TR* (2003).

5. A. Pietropaolo, **R. Senesi**, C. Andreani, G. Gorini, M. Tardocchi, "New perspectives for electron Volt neutron spectroscopy on inverse geometry instruments at pulsed sources", *ICANS-XVI Proceedings of the 16th Meeting of the international collaboration on advanced neutron sources -2003*(2003).
4. C. Andreani,A. Pietropaolo, **R. Senesi**, G. Gorini, M. Tardocchi, A. Bracco N. Rhodes, E. M. Schooneveld , "Electron Volt spectroscopy at a pulsed neutron source using a resonance detector technique", *CCLRC Technical Report RAL-TR-2002-015* (2002).
3. **R. Senesi**, C. Andreani and D. Colognesi, "Single particle kinetic energy in solid and dense liquid  $^3\text{He}$ " articolo su **INVITO** in Highlights of ISIS Science, The Rutherford Appleton Laboratory - ISIS Facility Annual Report 2000-2001, *CCLRC Technical Report RAL-TR-2001-050* Pag 60-61 (2001).
2. **R. Senesi**, C. Andreani, D. Colognesi, A. Cunsolo, M. Nardone, "Kinetic energy in solid  $^3\text{He}$  from deep inelastic neutron scattering", *Società Italiana di Fisica, Atti di Conferenze* **76**, 97 (2001).
1. **R. Senesi**,A. L. Fielding, J. Mayers, M. Moxon, N. J. Rhodes, E. M. Schooneveld, "Detectors for Vesuvio", in Vesuvio Workshop proceedings (A. L. Fielding ed.) *CCLRC Technical Report RAL-TR-2000-020* (2000).

Roma, 22 aprile 2013

In Fede

Roberto Senesi

