

Curriculum vitae et studiorum of Prof. Paola Sassi

1. Istruzione e posizione accademica

Titolo di studio universitario: master in Chimica (110/110 con il massimo dei voti) presso l'Università di Perugia, Italia, il 25 luglio 1991

Libera professione: abilitazione all'esercizio della professione di chimico nella seconda sessione dell'anno accademico 1992-1993.

Corso di dottorato: dottorato in Scienze chimiche acquisito in data 17 novembre 1995.

Scuole e corsi: * 1-13 luglio 1991: "School of computational Chemistry", Dipartimento di Chimica dell'Università di Perugia, Italia; * 1-6 giugno 1992: "School of Molecular Dynamics", Villa Colombella, Perugia, Italia; * 23 giugno - 3 luglio 1992: "Scuola internazionale di fisica Enrico Fermi Corso CXX: Frontiers in Laser Spectroscopy", Villa Monastero, Como, Italia; * 19-23 giugno 1993: "Scuola nazionale di chimica fisica", Villa Gualino, Torino, Italia

2007-2017: professore aggregato di chimica fisica

2017-ad oggi: professore associato di Chimica Fisica presso l'Università di Perugia - Dipartimento di Biologia e Biotecnologia Chimica

2. Formazione scientifica post-laurea e stage

- come **visiting researcher** ha trascorso il periodo dal 19 ottobre al 21 dicembre 1992 nel laboratorio del Prof. Ole Sonnich Mortensen presso l'Istituto di Fisica dell'Università di Odense, Danimarca;

- nel 1994 ha frequentato il laboratorio del prof. Marek Pawlikowski presso il Dipartimento di Chimica Teorica dell'Università Jagellonica, Cracovia-Polonia, come **visiting scientist**.

4. Didattica

- 2000-2002: corso "Tecniche FTIR per il laboratorio di Chimica Fisica" - Laurea in Chimica - Università degli Studi di Perugia;

- 2001 ad oggi: supervisore di tesi di laurea triennale e magistrale in Chimica e Biotecnologie

- 2003 ad oggi: supervisore di tesi di dottorato in Scienze chimiche

- 2004-2009: assistenza tecnica per il corso di Chimica Fisica - Laurea in Scienze delle Arti - Università di Perugia;

- 2007-2009: corso di "Laboratorio di Chimica Fisica III" - master in Scienze chimiche - Università degli Studi di Perugia

- AA. 2007/08: corso di "Chimica generale" - Laurea in Ingegneria dei sistemi informatici - Università eCampus
- AA. 2007/08: corso di "Chimica e tecnologia dei materiali" - Laurea in ingegneria civile - Università eCampus
- AA. 2008/09- ad oggi: corso di "Spettroscopia molecolare" - Laurea magistrale in Scienze chimiche - Università degli Studi di Perugia
- AA. 2009/10- ad oggi: corso di "Chimica Fisica" - Laurea specialistica in Chimica e Tecnologia dei Farmaci - Università degli Studi di Perugia
- AA. 2018/19 ad oggi: corso di "LABORATORIO DI CHIMICA FISICA 1" - Laurea triennale in Chimica - Università degli Studi di Perugia
- Seminari sulla spettroscopia molecolare per i dottorandi in Scienze chimiche e in Scienze geofisiche

5. Associazioni

- Gruppo nazionale di discussione sulla spettroscopia Raman e gli effetti non lineari (GISR): membro del comitato nazionale
- Membro del gruppo European/Japanese Molecular Liquid Group (EMLG / JMLG).
- Società Chimica Italiana; membro eletto del comitato locale (Sezione Umbria) dal 2007 al 2012
- Presidente del comitato locale (Sezione Umbria) della Società Chimica Italiana (2016-2018)
- Past-presidente del comitato locale (Sezione Umbria) della Società chimica italiana (2019-2021)

6. Collaborazioni con Riviste scientifiche (revisione di manoscritti)

Journal of Physical Chemistry A-B; Journal of Molecular Liquids, Journal of Raman Spectroscopy, Vibrational Spectroscopy, Journal of Physics: condensed matter, Physical Chemistry Chemical Physics, Journal of Biophotonics, Molecules, Journal of Applied Spectroscopy, BBA, Cryobiology, Spectrochimica Acta.

7. Redazione di pubblicazioni

Co-editore con Assunta Morresi del volume "GNSR2003" atti del XVIII Congresso, Morlacchi Editore-Perugia, ISBN 88-89422-22-X

8. Contributi a invito

- conferenza plenaria al "XIV Congresso GNSR", Catania il 14 e 15 dicembre 1995, per la sezione "Spettroscopia Raman risonante"
- invited seminar on "The Raileigh-Brillouin scattering in liquids. Theory and experiment", department of Chemistry, University of Catania, May 9, 2000

- teaching at the "Scuola Nazionale GNSR. La tecnica Raman: fondamenti fisici, applicazioni multisettoriali e ricerca di frontiera." Perugia, September 15-17, 2003
- teaching at the "Scuola Nazionale di Spettroscopia Raman", Catania, June 25-26, 2007

9. Altre attività scientifiche

Ha contribuito all'organizzazione dei seguenti eventi:

- "Scuola residenziale di dinamica molecolare", Villa Colombella (Perugia) June 1-6, 1992
- "III Convegno di Spettroscopie ottiche. GNSR-Raman ". Perugia, November 3-6, 1993
- Chairperson at the "XVIII National Congress GNSR 2003", Perugia, September 17-19, 2003
- "XXVI Convegno Interregionale TUMA", Assisi, 26-28 Settembre 2007
- "XXX Convegno Interregionale TUMA", Perugia, 30 Giugno-1 Luglio 2011
- "Frontiers in water biophysics 2012", Perugia, 23-26 Settembre 2012
- "GISR 2016", Padova 14-16 Settembre 2016
- "GISR 2017", Trieste 6-9 Giugno 2017
- "VISPEC 2019: International Summer School on Vibrational Spectroscopy", Brescia 9-13 2019

Da gennaio 2017 è **membro del comitato di revisione delle proposte di ELETTRA SINCROTRONE** Trieste - Beamline: Scattering e **membro del comitato di revisione delle proposte del consorzio europeo per le infrastrutture di ricerca** (CERIC-ERIC) - beamline IUVS.

10. Progetti recentemente finanziati

- "Novel nanoparticles-based approach to brain cancer therapy" – SIR 2014 codice RBSI144EUA (participant)
- "Unfolding and aggregation of lysozyme in crowding conditions: molecular insights on both protein and solvent milieu" – Fondo d'Ateneo per la ricerca di base 2017 (participant)
- "Biota resilience to global change: biomineralization of planktic and benthic calcifiers in the past, present and future" - PRIN2017 (participant)

11. Partecipazioni a congressi

E' autrice e co-autrice di più di 150 (poster e orali) contributi a congresso

12. Pubblicazioni

1. P. Sassi and R.S. Cataliotti

"Intraband vibronic coupling between excited electronic states in cis-polyacetylene by Raman resonance scattering"

Mol. Phys., **77(5)**, (1992) 937-945

2. P. Sassi, M. Pawlikowski and R.S. Cataliotti

"Origin of depolarization dispersion of totally symmetric fundamental transitions in the resonance Raman effect of soluble cis-poliacetylene"

Phys. Rev. B, **50(13)**, (1994) 9128-9134

3. M.L. Ceccarani, P. Sassi and R.S. Cataliotti

"Electronic transitions in metallocenes by resonance Raman scattering. Part 1.-Analysis of the ferrocene spectrum in the visible region"

J. Chem. Soc. Faraday Trans., **90(10)**, (1994) 1397-1403

4. P. Sassi, M.L. Ceccarani and R.S. Cataliotti

"Electronic transitions in metallocenes by resonance Raman scattering. Part 2.-The low-energy visible spectrum of nickelocene"

Ber. Bunsen. Phys. Chem., **99**, (1995) 770-776

5. P. Sassi and M. Pawlikowski

"Depolarization dispersion of totally symmetric fundamentals in resonance Raman (RR) spectra. Analysis for azobenzene dyes"

Acta Phys. Pol. A, **90(3)**, (1996) 509-518

6. P. Sassi, G. Paliani and R.S. Cataliotti

"Quasi-elastic light scattering by hydrodynamic modes in small polar molecules. Nitromethane"

Ziet. Phys. Chemie, **204**, (1998) 235-245

7. P. Sassi, G. Paliani and R.S. Cataliotti

"Brillouin spectra and vibrational-translational energy exchange in liquid acetonitrile"

J. Chem. Phys., **108(24)**, (1998) 10197-10204

8. Yu Liu, P. Comodi and P. Sassi

"Vibrational spectroscopic investigation of phosphate tetrahedron in fluor-, hydroxy-, and chlorapatites"

N. Jb. Miner. Abh., **174(2)**, (1998) 211-222

9. W. J. Barreto, S. Ponzoni and P. Sassi

"A Raman and UV-VIS study of catecholamines oxidized with Mn(III)"

Spectrochim. Acta A, **55**, (1999) 65-72

10. P. Sassi, A. Morresi, G. Paliani and R.S. Cataliotti

"Differences in the dynamic properties of liquid CH₃CN and CD₃CN above 40°C revealed by Rayleigh-Brillouin scattering spectroscopy"

J. Raman Spect., **30**, (1999) 501-506

11. A. Morresi, M. Paolantoni, P. Sassi, R. S. Cataliotti, G. Paliani,

"Non coincidence effect of aromatic ring vibrations"

J. Phys.: Condens. Matter **12**, (2000) 3631-3637.

12. P. Sassi, A. Morresi, G. Paliani, R.S. Cataliotti,

"Reorientational relaxation in a simple molar liquid: CD₃CN. A comparison with light acetonitrile"

J. Phys.: Condens. Matter **12**, (2000) 3615-3623.

13. R.S. Cataliotti, P. Sassi, A. Morresi, G. Paliani,

"Mandelstam-Brillouin spectra and hyperacoustic velocities dispersion of trideuteroacetonitrile in the liquid state"

Chem. Phys. **255**, (2000) 85-93.

14. A. Morresi, P. Sassi, M. Paolantoni, S. Santini, R.S. Cataliotti

"Solvent effect on the vibrational dephasing of the ν_2 (CN) and ν_4 (CC) stretching modes in liquid acetonitrile and acetonitrile- D_3 "

Chem. Phys. **254**, (2000) 337-347.

15. A. Morresi, P. Sassi, M. Ombelli, G. Paliani, R.S. Cataliotti

"Rotational dynamics in liquid acetonitrile. Temperature and concentration effects in the non-ideal CH_3CN/CCl_4 mixture"

PCCP. **2**, (2000) 2857-2861.

16. A. Morresi, P. Sassi, M. Ombelli, R.S. Cataliotti, G. Paliani

"Vibrational dynamics in liquid acetonitrile. Temperature and concentration effects in the non-ideal CH_3CN/CCl_4 mixture"

J Raman Spectrosc. **31**, (2000) 577-585.

17. B. Pignataro, A. De Bonis, G. Compagnini, P. Sassi, R.S. Cataliotti

"The role of micro- and nanomorphology of rough silver surfaces of different nature in surface enhanced Raman scattering effect: A combined study of scanning force microscopy and low-frequency Raman modes"

J. Chem. Phys. **113(14)**, (2000) 5947-5953.

18. M. Ricci, P. Sassi; C. Nastruzzi, C. Rossi

"Liposome-based formulations for the antibiotic nonapeptide leucinostatin A: Fourier transform infrared spectroscopy characterization and in vivo toxicologic study"

AAPS PharmSciTech **1(1)**, (2000) article 2

19. A. Morresi, M. Paolantoni, P. Sassi,

"The non-coincidence effect. A brief review of the structural and dynamical properties in liquid phase"

Recent Research Developments in Chemical Physics - Transworld Research Network, **1**, (2000) 67

20. M. Paolantoni, P. Sassi, A. Morresi, R.S. Cataliotti

"Reorientational dynamics in a liquid organized system: Brillouin and depolarized Rayleigh scattering experiments in 1-octanol"

Mol. Phys. **99(17)**, (2001) 1493-1502

21. R. S. Cataliotti, G. Compagnini, C. Crisafulli, S. Minicò, B. Pignataro, P. Sassi and S. Scirè

"Low-frequency Raman modes and Atomic Force Microscopy for the size determination of catalytic gold clusters supported on iron oxide"

Surface Science **494** (2001) 75-82

22. A. Morresi, M. Ombelli, P. Sassi, and S. Santini

"Light and deuterated acetonitrile: an unresolved casus?"

J. Raman Spect. **33** (2002) 71-79

23. P. Sassi, A. Morresi, M. Paolantoni, R.S. Cataliotti

"Structural and dynamical investigations of 1-octanol: a spectroscopic study"

J. Mol. Liq. **96-97** (2002) 363-377

24. M. Ombelli, A. Morresi, P. Sassi, G. Paliani

"Vibrational and orientational relaxations in liquid CD_3NO_2 "

J. Mol. Liq. **96-97** (2002) 379-389

25. R.S. Cataliotti, G. Compagnini, A. Morresi, M. Ombelli, P. Sassi

"Polarization Properties of Low Frequency Inelastic Scattering by Acoustic Phonons in Gold Nanoclusters"
PCCP **4(12)**, (2002) 2774-2779

26. P.Sassi, M. Paolantoni and A. Morresi

"Trans-gauche isomerization in 1-octanol probed by Brillouin Scattering Spectroscopy and computer simulation"
Chem.Phys.Lett., **357(3-4)**, (2002) 293-296

27. A. Raudino, P. Sassi, A. Morresi and R. S. Cataliotti

"Modelling the hydrodynamic fluctuations of self associating fluids: an application to the Brillouin scattering of 1-octanol"
J. Chem. Phys. **117(10)**, (2002) 4907-4924

28. P. Foggi, P. Bartolini, M. Bellini, M. G. Giorgini, A. Morresi, P. Sassi, R. S. Cataliotti

"Intermolecular and Diffusive Dynamics of Pure Acetonitrile Isotopomers Studied by Depolarized Rayleigh Scattering and Femtosecond Optical Kerr Effect"
European Physical Journal D, **21** (2002) 143-151

29. A. Morresi, M. Paolantoni, P. Sassi and A. Aluigi

"Non coincidence effect and orientational dynamics in aromatics molecules"
Mol. Phys., **100(23)**, (2002) 3677-3690

30. P. Sassi, V. D'Elia and R.S. Cataliotti

"Study of a non-ideal liquid mixture in the hydrodynamic regime. Rayleigh-Brillouin spectra, sound propagation and damping in the CH₃CN-CCl₄ system at the azeotropic composition"
Physica B, **325** (2003) 349-356

31. P.Sassi, A. Marcelli, M. Paolantoni, A. Morresi, R.S. Cataliotti

"Structural properties of 1-octanol/n-octane mixtures studied by Brillouin scattering"
J. Phys. Chem.A **107(32)** (2003) 6243-6248

32. P.Sassi, M. Paolantoni, R.S. Cataliotti, F. Palombo and A. Morresi

"Water/alcohol mixtures: a spectroscopic study of water saturated 1octanol solution"
J. Phys. Chem.B **108(50)** (2004) 19557-19565

33. M. Ombelli, R.S. Cataliotti, G. Compagnini, A. Morresi, P. Sassi

"Gold nanoclusters in gold-based catalytic beds: size determination and polarization effects by low-frequency Raman scattering"
GNSR2003, Morlacchi Editore Perugia (2004), 134

34. M. Paolantoni, P. Sassi, A. Morresi, R.S. Cataliotti

"Spectroscopic study of OH vibrations in self-associated liquids"
GNSR2003, Morlacchi Editore Perugia (2004), 9

35. M. Paolantoni, P. Sassi, F. Palombo, A. Morresi, G. Paliani, R.S. Cataliotti

"H-bonding and depolarized Rayleigh scattering spectra: comparison between 1-octanol and n-octane liquid systems"
GNSR2003, Morlacchi Editore Perugia (2004), 18

- 36. M. Paolantoni, P.Sassi, A. Morresi, R.S. Cataliotti**
"Infrared study of 1-octanol liquid structure"
Chem. Phys. **310** (2005) 169-178
- 37. A. Morresi, P. Sassi, M. Paolantoni, F. Palombo, R.S. Cataliotti**
"New evidence for non-coincidence effects in alcohols"
J. Raman Spectrosc. **36** (2005) 267-268
- 38. P. Sassi, A. Raudino, R. S. Cataliotti**
"Isotope effects on the hydrodynamic fluctuations of self-associating fluids. A comparison between the Brillouin scattering of 1-octanol and its hydrocarbon chain perdeuterated analogue"
Chem. Phys. **314** (2005) 199-209
- 39. M. Freda, A. Piluso, A. Santucci, P.Sassi**
"Transmittance FTIR spectra of liquid water in the whole Mid-infrared region: temperature dependence and structural analysis"
Applied Spectrosc. **59** (2005) 1155-1159
- 40. I. Calzuola, F. Giavarini, P. Sassi, L. De Angelis, G.L. Gianfranceschi, V. Marsili**
"Molecular characterization of short acidic peptides isolated from wheat sprout and involved in the control of cell proliferation using infrared spectroscopy and mass spectrometry"
Peptides, **26** (2005) 2074-2085
- 41. M. Paolantoni, P.Sassi, A. Morresi, R.S. Cataliotti**
"Raman noncoincidence effect on OH stretching profiles in liquid alcohols"
J. Raman Spectrosc. **37** (2006) 528-537
- 42. F. Palombo, P. Sassi, M. Paolantoni, A. Morresi, and R. S. Cataliotti**
"Spectroscopic studies of the "free" OH stretching bands in liquid alcohols".
J. Mol. Liq. **125** (2006) 139-146
- 43. M.E. Gallina, P. Sassi, M. Paolantoni, A. Morresi, R.S. Cataliotti**
"Vibrational analysis of molecular interactions in the aqueous glucose solutions. Temperature and concentration effects. "
J. Phys. Chem. B, **110** (2006) 8856-8864
- 44. F. Palombo, P.Sassi, M. Paolantoni, A. Morresi, R.S. Cataliotti**
"Comparison of hydrogen bonding in 1-octanol and 2-octanol as probed by spectroscopic techniques"
J. Phys. Chem. B, **110** (2006) 18017-18025
- 45. A. Di Michele, M. Freda, G. Onori, M. Paolantoni, A. Santucci, P.Sassi**
"Modulation of hydrophobic effect by cosolutes"
J. Phys. Chem. B **110** (2006) 21077-21085
- 46. R.S. Cataliotti, F. Palombo, M. Paolantoni, P.Sassi, A. Raudino**
"Concentration fluctuations and collective properties in mixed liquid systems. Rayleigh-Brillouin spectra of tert-butanol/2,2-dimethylbutane liquid mixture"
J. Chem. Phys., **126** (2007) 44505
- 47. D. Fioretto, L. Comez, M. E. Gallina, A. Morresi, L. Palmieri, M. Paolantoni, P.Sassi, F. Scarponi**
"Separate dynamics of solute and solvent in water-glucose solutions by depolarized light scattering"
Chem Phys. Lett. **441** (2007) 232-236

48. S.A. Kirillov, A. Morresi, M. Paolantoni, P. Sassi

"Possible spectroscopic manifestation of the angular group induced bond alteration (AGIBA) effect in toluene"

J. Phys. Org. Chem., **20** (2007) 568-573

49. M. Paolantoni, P.Sassi, A. Morresi, S. Santini

"Hydrogen bond dynamics and water structure in glucose-water solutions by depolarized Rayleigh scattering and low-frequency Raman spectroscopy"

J. Chem. Phys., **127** (2007) 24504

50. P.Sassi, F. Palombo, R.S. Cataliotti, M. Paolantoni, A. Morresi

"Distribution of H-bonding aggregates in tert-butyl alcohol: the pure liquid and its alkane mixture"

J. Phys. Chem. A, **111** (2007) 6020-6027

51. C. Petersen, J. Thorgesen, S.K. Jensen, S. Keiding, P.Sassi

"Solvent response to solute photo-dissociation"

PCCP, **10** (2008) 990-995

52. S. Perticaroli, P.Sassi, A. Morresi, M. Paolantoni

"Low-wavenumber Raman scattering from aqueous solutions of carbohydrates"

J. Raman Spectrosc., **39** (2008) 227-232

53. M. Paolantoni, L. Comez, D. Fioretto, M.E. Gallina, A. Morresi, P.Sassi, F. Scarponi

"Structural and dynamical properties of glucose aqueous solutions by Depolarized Rayleigh scattering"

J. Raman Spectrosc., **39** (2008) 238-243

54. M. E. Gallina, L. Comez, S. Perticaroli, A. Morresi, A. Cesàro, O. De Giacomo, S. Di Fonzo, A. Gessini, C. Masciovecchio, L. Palmieri, M. Paolantoni, P. Sassi, F. Scarponi, D. Fioretto

"Density fluctuations of water-glucose mixtures studied by Inelastic Ultra-Violet Scattering "

Philosophical magazine, **88** (2008) 3991-3998

55. A. Di Michele, P. Diodati, A. Morresi, P.Sassi

"Mercury acetate produced by metallic mercury subjected to acoustic cavitation in a solution of acetic acid in water"

Ultrasonics Sonochemistry, **16** (2009) 141-144

56. P.Sassi, M. Paolantoni, S. Perticaroli, F. Palombo, A. Morresi

"A study of collective motions in liquid tert-butanol from low-wavenumbers Raman scattering"

J. Raman Spectrosc., **40** (2009) 1279-1283

57. M. Paolantoni, M. E. Gallina, P.Sassi, A. Morresi

"Structural properties of α -D-glucose solutions in dimethylsulphoxide probed by Raman spectroscopy"

J. Chem. Phys., **130** (2009) 164501

58. M. Paolantoni, L. Comez, M. E. Gallina, P. Sassi, L. Lupi, F. Scarponi, D. Fioretto, A. Morresi

"Light scattering spectra of water in trehalose aqueous solutions: evidence for two different solvent relaxation processes"

J. Phys. Chem. B **113** (2009) 7874-7878

59. F. Bellezza, A. Cipiciani, L. Latterini, T. Posati, P.Sassi

"Structure and Catalytic Behavior of Myoglobin Adsorbed onto Nanosized Hydrotalcites"

Langmuir, **25(18)** (2009) 10918-10924

- 60. M.E. Gallina, L. Comez, A. Morresi, M. Paolantoni, S. Perticaroli, P.Sassi, D. Fioretto**
"Rotational dynamics of trehalose in aqueous solutions studied by depolarized light scattering"
J. Chem. Phys., **132** (2010) 214508
- 61. S. Perticaroli, L. Comez, M. Paolantoni, P. Sassi, D. Fioretto, A. Paciaroni, A. Morresi**
"Broadband Depolarized Light Scattering Study of Diluted Protein Aqueous Solutions"
J. Phys. Chem. B, **114** (2010) 8262-8269
- 62. F. Palombo, T. Tassaing, M. Paolantoni, P. Sassi, A. Morresi**
"Elucidating the association of water in wet 1-octanol from normal to high temperature by near- and mid-infrared spectroscopy"
J. Phys. Chem. B, **114** (2010) 9085-9093
- 63. P.L. Gentili, M. Penconi, F. Costantino, P. Sassi, F. Ortica, F. Rossi, F. Elisei**
"Structural and photophysical characterization of some $\text{La}_{2x}\text{Ga}_{2y}\text{In}_{2z}\text{O}_3$ solid solutions, to be used as photocatalysts for H_2 production from water/ethanol solutions"
Sol energ mat sol c, **94** (2010) 2265-2274
- 64. P. Sassi, G. Onori, A. Giugliarelli, M. Paolantoni, S. Cinelli, A. Morresi**
"Conformational changes in the unfolding process of lysozyme in water and ethanol/water solutions"
J. Mol. Liq., **159** (2011) 112-116
- 65. L. Lupi, L. Comez, C. Masciovecchio, A. Morresi, M. Paolantoni, P. Sassi, F. Scarponi, D. Fioretto**
"Hydrophobic hydration of tert-butyl alcohol studied by Brillouin Light and Inelastic Ultraviolet Scattering"
J. Chem. Phys., **134** (2011) 055104
- 66. P. Sassi, A. Giugliarelli, M. Paolantoni, A. Morresi, G. Onori**
"Unfolding and aggregation of lysozyme: a thermodynamic and kinetic study by FTIR spectroscopy"
Biophysical Chemistry, **158** (2011) 46-53
- 67. F. Palombo, M. Paolantoni, P. Sassi, A. Morresi, M.G. Giorgini**
"Molecular dynamics of liquid acetone determined by depolarized Rayleigh and low-frequency Raman scattering spectroscopy"
Phys. Chem. Chem. Phys., **13** (2011) 16197-16207
- 68. S. Perticaroli, L. Comez, M. Paolantoni, P. Sassi, A. Morresi, D. Fioretto,**
"Extended frequency range Depolarized Light Scattering study of NALMA-water solutions"
J. of Am. Chem. Soc., **133** (2011) 12063-12068
- 69. P. Sassi, S. Perticaroli, L. Comez, L. Lupi, M. Paolantoni, D. Fioretto, A. Morresi**
"Reversible and irreversible denaturation processes in globular proteins: from collective to molecular spectroscopic analysis "
Journal of Raman Spectroscopy, **43** (2012) 273-279
- 70. A. Giugliarelli, P. Sassi, M. Paolantoni, G. Onori, C. Cametti**
"Heat-Denatured Lysozyme Aggregation and Gelation as Revealed by Combined Dielectric Relaxation Spectroscopy and Light Scattering Measurements"
J. Phys. Chem. B, **116** (2012) 10779-10785
- 71. F. Costantino, P. Sassi, M. Geppi, M. Taddei**

"A Multi-technique Experimental Insight On An Unusual Crystal-to-Crystal High Temperature Solid State Reaction in Zirconium Carboxypyridinephosphonates: from 1D Chains to 2D Hybrid Layers Through HF Elimination"

Cryst. Growth Des., **12** (2012) 5462–5470

72. A. Giugliarelli, M. Paolantoni, A. Morresi, P. Sassi

"Denaturation and preservation of globular proteins: the role of DMSO"

J. Phys. Chem. B, **116** (2012) 13361–13367

73. L. Lupi, L. Comez, M. Paolantoni, S. Perticaroli, P. Sassi, A. Morresi, B.M. Ladanyi, D. Fioretto "Hydration and Aggregation in Mono- and Disaccharide Aqueous Solutions by GHz-to-THz Light Scattering and Molecular Dynamics Simulations"

J. Phys. Chem. B, **116** (2012) 14760–14767

74. A. Giugliarelli, P. Sassi M. Paolantoni, A. Morresi, R. Dukor, L. Nafie

"Vibrational circular dichroism spectra of lysozyme solutions: solvent effects on thermal denaturation processes"

J. Phys. Chem. B, **117** (2013) 2645-2652

75. M. Casciola, A. Donnadio, P. Sassi

"A critical investigation of the effect of hygrothermal cycling on hydration and in-plane/through-plane proton conductivity of Nafion 117 at medium temperature (70-130 °C)"

J. Power Sources B, **235** (2013) 129-134

76. L. Comez, L. Lupi, A. Morresi, M. Paolantoni, P. Sassi, D. Fioretto

"More is different: experimental results on the effect of biomolecules on the dynamics of hydration water"

J. Phys. Chem. Lett., **4** (2013) 1188-1192

77. D.Fioretto, L.Comez, S.Corezzi, M.Paolantoni, P.Sassi, A.Morresi

"Solvent sharing models for non-interacting solute molecules: The case of glucose and trehalose water solutions."

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