

CURRICULUM VITAE



INFORMAZIONI PERSONALI

Nome	Flavio Rossi
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Nazionalità	Italiana
Data di nascita	29-10-1960

ESPERIENZE LAVORATIVE

- | | |
|---|--|
| • Date (da – a) | 01-02-1989 - oggi |
| • Nome e indirizzo del datore di lavoro | Università Studi di Trento - via Belenzani |
| • Tipo di azienda o settore | Università |
| • Tipo di impiego | Ricercatore – assistente alla didattica |
| • Principali mansioni e responsabilità | Area Ricerca e Didattica - Responsabile di due laboratori: Raman e Brillouin |

ISTRUZIONE E FORMAZIONE

- | | |
|---|---|
| • Date (da – a) | 1979 - 1985 |
| • Nome e tipo di istituto di istruzione o formazione | Università Studi di Trento Facoltà di Scienze Mat. Fis. e Nat. Laurea in Fisica |
| • Principali materie / abilità professionali oggetto dello studio | Fisica Sperimentale nel campo della Spettroscopia Ottica |
| • Qualifica conseguita | Laurea in Fisica (110 e lode) |
| • Date (da – a) | 1974 - 1979 |
| • Nome e tipo di istituto di istruzione o formazione | Liceo Scientifico " G. Fra castoro" (Vr) |
| • Principali materie / abilità professionali oggetto dello studio | |
| • Qualifica conseguita | Diploma (56/60) |

CAPACITÀ E COMPETENZE PERSONALI

MADRELINGUA	italiana
ALTRE LINGUE	inglese
	francese

PUBBLICAZIONI

- 1) *G.Mariotto, M.Montagna, F.Rossi*
"Thermal shift and broadening of the ${}^2E-{}^4A_2$ zero phonon lines in beta-alumina: Cr^{3+} crystals"
J. de Physique **C7**, 343 (1985)
- 2) *G.Mariotto, M.Montagna, F.Rossi*
"Luminescence of Cr^{3+} in beta alumina crystals"
Sol. State Ionics **18/19**, 636 (1986)
Proceedings of the 5th Int. Conf. on Solid State Ionics, Lake Tahoe (USA) 1985
- 3) *G.Mariotto, M.Montagna, F.Rossi*
"Spectroscopy of sodium-beta-alumina: Cr^{3+} "
J. of Physics **C19**, 3029 (1986)
- 4) *G.Mariotto, M.Montagna, F.Rossi*
"Luminescence of Cr^{3+} ions in mixed Na^+-Cd^{2+} beta-alumina crystals"
Phys. Rev. B **34**, 6126 (1986)
- 5) *M.Montagna, G.Mariotto and F.Rossi*
"Low-temperature homogeneous linewidth of the ${}^2E-{}^4A_2$ transition of Cr^{3+} in silver beta alumina"
J. of Luminescence **40/41**, 183 (1988)
Proceeding of the 1987 Int. Conference on Luminescence, Beijing 1987
- 6) *G.Mariotto, M.Montagna and F.Rossi*
"Spectroscopy of sodium β -alumina: Cr^{3+} "
Solid State Ionics **28-30**, 311 (1988)
Proceedings of the 6th Int. Conf. on Solid State Ionics, Garmisch 1987
- 7) *G.Mariotto, M.Montagna and F.Rossi*
"Temperature dependence of homogeneous spectral widths of the ${}^2E-{}^4A_2$ transition of Cr^{3+} in silver β -alumina"
Phys. Rev. B **38**, 1072 (1988)
- 8) *G.Mariotto, M.Montagna, F.Rossi*
"A comparative analysis of the luminescence of Cr^{3+} ion in sodium beta and beta"-alumina crystals"
Solid State Ionics **40/41**, 328 (1990)
- 9) *G.Mariotto, M.Montagna, F. Rossi, E. Zanghellini, E. Cazzanelli*
"Laser spectroscopy of sodium beta"-Alumina crystals"
Key Engineering Materials **59/60**, 77 (1991)
- 10) *B.Andrianasolo, M.Ferrari, A.Monteil, E.Duval, A.Serughetti, R.Campostrini, G.Carturan, M.Montagna, F.Rossi*
"Densification process in silica sol-gel. Monitoring by optical and Raman spectroscopy"
J. de Physique IV **C7**, 501 (1991)
- 11) *A. Monteil, M. Ferrari, F. Rossi*
"Fluorescence line narrowing in Cr^{3+} -doped gallium gadolinium garnet under a magnetic field "
Phys. Rev. **B 43**, 3646 (1991)
- 12) *T.Beltrame, G.Mariotto, M.Montagna, F.Rossi*
"Fluorescence Line Narrowing of Cr^{3+} Ion in Sodium beta and beta" Alumina crystals"
J. of Luminescence **48/49**, 537 (1991)
- 13) *L. Pavesi, M. Ceschini, F. Rossi*
"Photoluminescence of porous silicon"
J. of Luminescence **57**, 131 (1993)
- 14) *F.Rossi, G.Mariotto, M.Montagna, M.Ferrari*
"Luminescence of the Cr^{3+} ion in sodium beta- and beta"-alumina: Site selection by time resolved fluorescence line narrowing"

- Phys. Rev. **B 49**, 6501 (1994)
- 15) *A. Fontana, E. Moser, F. Rossi, R. Campostrini, G. Carturan*
“Low-Frequency Dynamics in Silica Xerogels”
J. Phys.: Cond. Matter **8**, 9575 (1996)
 - 16) *A. Fontana, F. Rossi, G. Carini, G. D’Angelo, G. Tripodo, A. Bartolotta*
“Low energy Vibration Excess in Silica Xerogels”
Phys. Rev. Letters **78**,1078(1997).
 - 17) *A. Fontana, E. Moser, F. Rossi, R. Campostrini, G. Carturan*
“Structure and Dynamics of Hydrogenated Silica Xerogel by Raman and Brillouin Scattering”
J. Non-Cryst. Solids **212**,292 (1997)
 - 18) *G. Carini, G. D’Angelo, G. Tripodo, A. Fontana, F. Rossi, G. A. Saunders*
“ Low energy magnetic excitations in Pr methaphosphate glass”
Europhysics Letters **40**,435(1997)
 - 19) *L. Del Longo, M. Ferrari, E. Zanghellini, M. Bettinelli, J. A. Capobianco, M. Montagna, F. Rossi*
“Optical spectroscopy of zinc borate glass activated by Pr³⁺ ions”
J. Non-Cryst. Solids **231**, 178-188 (1998).
 - 20) *M.Montagna, M.Ferrari, F.Rossi, F.Tonelli, C.Tosello*
“Brillouin scattering in planar waveguides”
Phys. Rev. B **58**, R547-550 (1998)
 - 21) *F. Rossi, M. Montagna, M. Ferrari, J. A. Capobianco, M. Bettinelli*
“Line width measurements of Cr³⁺ in a zinc borate glass”
J. Non-Cryst. Solids, **240**, 232-236 (1998)
 - 22) *A. Fontana, F. Rossi, G. Carini, G. D’Angelo, G. Tripodo, A. Bartolotta*
“ Thermal and vibrational properties of silica xerogels”
Philosophical Magazine **B77**,333 (1998)
 - 23) *G. Carini, G. D’Angelo, G. Tripodo, A. Bartolotta, A. Fontana, F. Rossi, G. A. Saunders*
“Specific heat of rare earth ions in crystalline and glassy phosphate matrices”
Philosophical Magazine **B77**,449 (1998)
 - 24) *M. Ferrari, M. Montagna, S. Ronchin, F. Rossi, G.C. Righini*
“Waveguide luminescence and Raman spectroscopy: characterization of an inhomogeneous film at different depths”
Applied Physics Letters **75**, 1529-31 (1999)
 - 25) *A. Fontana, M. Montagna, F. Rossi, M. Ferrari, J. Pelous, F. Terki, T. Woigner*
“ Low frequency light scattering in silica xerogels”
J. Phys.: Condensed Matter **11**, A207(1999).
 - 26) *G. Tripodo, G. D’Angelo, G. Carini, A. Bartolotta, A. Fontana, F. Rossi*
“ Low-energy vibrational dynamics and connectivity in borate glasses”
J. Phys.: Condensed Matter **11**, A229 (1999).
 - 27) *A. Bartolotta, G. Carini, G. D’Angelo, A. Fontana, F. Rossi, G. Tripodo*
“ Low-energy vibrational dynamics of hydrogenated silica gels”
J. Non-Cryst. Solids **245**, 9 (1999)
 - 28) *A. Fontana, R. Dell’Anna, M. Montagna, F. Rossi, G. Vilianni, G. Ruocco, M. Sampoli, U. Buchenau, A. Wischniewski.*
“The Raman coupling function in amorphous silica and the nature of the long wavelength excitations in disordered systems”
Europhysics Letters **47**, 56 (1999)

- 29) *G. Cicognani, A. J. Dianoux, A. Fontana, F. Rossi, M. Montagna, T. Scopigno, Pelous, F. Terki, J. N. Pilliez, T. Woigner*
 “Low frequency dynamics of silica xerogel porous system”
Philosophical Magazine **79**, 2091(1999)
- 30) *F. Terki, J. N. Pilliez, T. Woigner, J. Pelous, A. Fontana, F. Rossi, M. Montagna, M. Ferrari, G. Cicognani, A. J. Dianoux*
 “Low -frequency light scattering in silica xerogels: influence of heat treatment”
Philosophical Magazine **79**, 2081(1999)
- 31) *A. Fontana, F. Rossi, C. Armellini, G. D’Angelo, G. Tripodo, A. Bartolotta*
 “Low-temperature optical and thermal properties of AgI-based phosphate glasses ”
Philosophical Magazine **79**, 2073(1999)
- 32) *C. Masciovecchio, V. Mazzacurati, G. Monaco, G. Ruocco, T. Scopigno, F. Sette, P. Benassi, A. Cunsolo, A. Fontana, M. Krish, A. Mermet, M. Montagna, F. Rossi, M. Sampoli, G. Signorelli, R. Verbeni*
 “Acoustic Nature of the Excess Vibrational states in vitreous silica”
Philosophical Magazine **79**, 2013(1999)
- 33) *Armellini C., Ferrari M., Duverger C., Montagna M., Moser E., Rolli R., Ronchin S., Rossi F., Tosello C.*
 “Optical, Spectroscopic and Structural Characterization of Glasses and Planar Waveguides Activated by Rare-Earth Ions”
 Atti del Workshop italiano Sol-Gel, Padova 11 giugno 1999, curatori: M. Guglielmi, P. Innocenzi, G. Brusatin e M. Martucci, pp 116-123
- 34) *Ronchin S., Tosello C., Moser M., Montagna M., Rossi F., Duverger C., Ferrari M., Armellini C.*
 “Guide d’onda planari attivate con ioni Er³⁺ e Pr³⁺ prodotte tramite le tecniche Rf-sputtering e sol-gel”
 FOTONICA 99, Trento, 2-4 giugno 1999, pp 133-136
- 35) *F. Rossi, G. Pucker, M. Montagna, M. Ferrari, A. Boukenter*
 “Fluorescence Line Narrowing study of Cr³⁺ ions in cordierite glass nucleating MgAl₂O₄ nanocrystals”
Optical Materials **13**, 373-380 (2000)
- 36) *M. Montagna, S. Ronchin, F. Rossi, C. Tosello, E. Moser, M. Ferrari, G. C. Righini*
 “Waveguided Raman and Brillouin Scattering”
 SPIE, vol. **3942** (Rare Earth Doped Materials and Devices IV), 224-231 (2000)
- 37) *Chiasera A., Duverger C., Montagna M., Moser E., Rolli R., Ronchin S., Rossi F., Tosello C., Zampedri L., Pelli S., Righini G., Armellini C., Ferrari M.,*
 "Erbium-activated monolithic silica xerogels and silica-titania planar waveguides; optical and spectroscopic characterization".
 Atti del convegno "2° Workshop italiano Sol-Gel", Parma, 2000, pp. 85
- 38) *G. Carini, G. D’Angelo, G. Tripodo, A. Fontana, F. Rossi, G. A. Saunders*
 “Effect of glassy topological disorder on low-energy magnetic excitations”
Europhysics Letters **49**,99(2000)
- 39) *R. Dolesi, F. Rossi, R. Torii, S. Vitale*
 “Effect of gravity on Helium II in aerogel”
Adv. Space. Res. **25**, 1215 (2000)
- 40) *A. Fontana, M. Montagna, F. Rossi, L. Righetti, G. Cicognani, A. J. Dianoux, F. Terki*
 “Inelastic neutron scattering on silica xerogel porous systems”
J. Non-Cryst. Solids **280**, 217(2001)
- 41) *C. Tosello, F. Rossi, S. Ronchin, R. Rolli, G.C. Righini, F. Pozzi, S. Pelli, M. Fossi, E. Moser, M. Montagna, M. Ferrari, C. Duverger, A. Chiappini, C. De Bernardi*
 “Erbium-activated silica-titania planar waveguides on silica-on-silicon substrates prepared by rf sputtering”
J. Non-Cryst. Solids **284**, 230-229 (2001)

- 42) *R. Ceccato, R. Dal Maschio, S. Gialanella, G. Mariotto, M. Montagna, F. Rossi, M. Ferrari, K.E. Lipinska-Kalita, and Y. Ohki*
 "Nucleation of Ga₂O₃ Nanocrystals in the K₂O-Ga₂O₃-SiO₂ Glass System"
J. App. Phys. **90**, 2522 - 2527 (2001)
- 43) *L. Zampedri, C. Tosello, F. Rossi, S. Ronchin, R. Rolli, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, A. Monteil, S. Chaussedent, C. Bernard, C. Duverger, M. Ferrari, C. Armellini*
 "Erbium-Activated Monolithic Silica Xerogels and Silica-Titania Planar Waveguides: Optical and Spectroscopic Characterization"
SPIE Vol. **4282**, 200-209 (2001)
- 44) *A. Chiasera, M. Montagna, E. Moser, R. Rolli, S. Ronchin, F. Rossi, C. Tosello, L. Zampedri, S. Pelli, G.C. Righini, C. De Bernardi, P. Della Casa, C. Panciatichi, F. Pozzi, G. Battaglin, F. Gonella, P. Mazzoldi, R. Belli, M. Ferrari*
 "Guide di luce planari SiO₂-TiO₂ attivate con ioni Er³⁺ prodotte per RF-sputtering su substrati silicea on silicon"
 In "40 anni di laser", Quaderni di ottica e fotonica **7**, ed. SIOF, 79-84 (2001)
- 45) *L. Zampedri, C. Tosello, F. Rossi, S. Ronchin, R. Rolli, E. Moser, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, A. Monteil, S. Chaussedent, C. Duverger, S.J.L. Ribeiro, R.R. Goncalves, M. Ferrari, C. Armellini*
 "Guide di luce planari SiO₂-TiO₂:Er³⁺ e vetri SiO₂-ErO₃ prodotti per via sol gel"
 In "40 anni di laser", Quaderni di ottica e fotonica **7**, ed. SIOF, 85-90 (2001)
- 46) *S. Caponi, M. Ferrari, D. Fioretto, M. Montagna, F. Rossi, C. Tosello, and L. Zampedri*
 "Brillouin Scattering in Silica-titania Waveguides"
 Proc. of 17th I.C.A., Rome, September 2001, 3B.03.05.
- 47) *R. Ceccato, R. Dal Maschio, M. Ferrari, S. Gialanella, K.E. Lipinska-Kalita, G. Mariotto, M. Montagna, Y. Ohki, and F. Rossi*
 "Low-wavenumber Raman scattering spectroscopy in studies of new gallium-doped silica glass-based transparent vitroceraamic medium"
J. Raman Spectroscopy **32** (8), 643 - 647 (2001)
- 48) *G. D'Angelo, G. Tripodo, A. Bartolotta, G. Carini, A. Fontana, M. Montagna, F. Rossi, M. Ferrari, F. Terki*
 "Low temperature specific heats of porous silica xerogels of low densities"
J. Non-Cryst. Solids **280**, 222 (2001)
- 49) *A. Bartolotta, G. Carini, G. D'Angelo, M. Ferrari, A. Fontana, M. Montagna, F. Rossi, G. Tripodo*
 "A study of Raman spectroscopy and low temperature specific heat in gel-synthesised amorphous silica"
J. Non-Cryst. Solids **280**, 249 (2001)
- 50) *O. Pilla, S. Caponi, A. Fontana, M. Montagna, L. Righetti, F. Rossi, G. Villani, G., Ruocco, G. Monaco, F. Sette, R. Verbeni, G. Cicognani, and A. J. Dianoux*
 "X-ray and neutron scattering studies in vitreous silica: acoustic nature of vibrational dynamics in the mesoscopic range"
Philosophical Magazine **82**, 223 (2002)
- 51) *F. Rossi, A. Fontana, L. Righetti*
 "Temperature behaviour of quasielastic scattering in silver phosphate glass"
Philosophical Magazine **B 82**, 323 (2002)
- 52) *A. Fontana, L. Righetti, F. Rossi, G. D'Angelo, L. Borjesson, A. Matic, G. Cicognani and A.J. Dianoux*
 "Dynamics of silver phosphate glasses by light and neutron scattering measurements"
Philosophical Magazine **B 82**, 257 (2002)
- 53) *A.M.R. Teixeira, O. Pilla, F. Rossi, P.T.C. Freire, F.E.A. Melo, J. Mendes Filho, V. Lemos*
 "Brillouin scattering study of phase transition in LiK_{0.80}(NH₄)_{0.20}SO₄ mixed crystals"
J. Phys. Chem. Solids **63**, 1951-1956 (2002)
- 54) *S. Caponi, M. Ferrari, A. Fontana, C. Masciovecchio, A. Mermet, M. Montagna, F. Rossi, G. Ruocco, F. Sette*
 "X-ray diffraction and Raman scattering measurements on silica xerogels"
J. Non-Cryst. Solids **307-310**, 135-141 (2002)

- 55) *E. Fabiani, M.A. Gonzalez, S. Caponi, A. Fontana, M. Montagna, O. Pilla, F. Rossi, C.P.E. Varsamis*
 “Neutron scattering studies of vitreous germania”
J. Non-Cryst. Solids **322** 7-10 (2003)
- 56) *S. Caponi, A. Fontana, M. Montagna, O. Pilla, F. Rossi, F. Terki, T. Woignier*
 “Acoustic attenuation in silica porous system”
J. Non-Cryst. Solids **322** 29-34 (2003)
- 57) *O. Pilla, A. Fontana, S. Caponi, F. Rossi, G. Viliani, M.A. Gonzalez, E. Fabiani, C.P.E. Varsamis*
 “Vibrational dynamic of “strong” glasses: the case of v-SiO₂ and v-GeO₂”
J. Non-Cryst. Solids **322** 53-57 (2003)
- 58) *A. Chiasera, M. Montagna, F. Rossi, M. Ferrari*
 “Brillouin scattering in planar waveguides. I. Numerical model”
J. App. Phys. **94**, 4876 - 4881 (2003)
- 59) *A. Chiasera, M. Montagna, E. Moser, F. Rossi, C. Tosello, M. Ferrari, L. Zampedri, S. Caponi, R.R. Goncalves, S. Chaussement, A. Monteil, D. Fioretto, G. Battaglin, F. Gonella, P. Mazzoldi, G.C. Righini*
 “Brillouin scattering in planar waveguides. II. Experiments”
J. App. Phys. **94**, 4882 - 4889 (2003)
- 60) *R. Di Maggio, A. Fontana, F. Rossi*
 “Brillouin spectroscopy measurements on Hybrid inorganic-organic materials obtained from aluminum and zirconium alkoxides”
J. Non-Cryst. Solids **325**, Issue 1-3, 158-163(2003)
- 61) *O. Pilla, S. Caponi, A. Fontana, J. R. Goncalves, M. Montagna, F. Rossi, G. Villani, L. Angelani, G. Rocco, G. Monaco, F. Sette.*
 “The low energy excess of vibrational states in v-SiO₂ : the role of transverse dynamics”
J. Physics: Condensed Matter **16**, 8519 (2004).
- 62) *R. Di Maggio, F. Rossi, L. Fambri, A. Fontana,*
 “Raman and Brillouin scattering measurements on hybrid inorganic-organic materials obtained from tetraethoxysilane and methacrylic monomers”
J. Non-Cryst. Solids **345&346**, 591-595 (2004)
- 63) *S. Caponi, G. Carini, G. D’Angelo, A. Fontana, O. Pilla, F. Rossi, F. Terki, G. Tripodo, and T. Woigner*
 “Acoustic and thermal properties of silica aerogels and xerogels”
Phys. Rev. B **70**, 214204 (2004)
- 64) *M. Mattarelli, M. Montagna, F. Rossi, M. Ferrari, V. Tikhomirov, A. B. Seddon*
 “Tm³⁺ activated transparent oxy-fluoride glass ceramics: a study by Raman scattering of the nanocrystal size distribution”
Glass Phys. And Chem. Vol **31**, 519-524 (2005)
- 65) *A. Fontana, F. Rossi, S. Caponi, E. Fabiani, U. Buchenau, A. Wischnewski*
 “Quasi-elastic scattering in vitreous silica: a Raman and Neutron scattering study”
J. Non-Cryst. Solids **351**, 1928-1931 (2005)
- 66) *A. Fontana, F. Rossi, E. Fabiani*
 “The Raman coupling function in v-GeO₂ and v-SiO₂: a new light and neutron scattering study”
J. Non-Cryst. Solids **352**, 4601-4605 (2006)
- 67) *M. Mattarelli, M. Montagna, F. Rossi, A. Chiasera, M. Ferrari*
 “Mechanism of low-frequency Raman scattering from acoustic vibrations of dielectric nanoparticles”
Phys. Rev. B **74**, 153412 (2006)
- 68) *A. Fontana, L. Orsingher, F. Rossi and U. Buchenau*
 “Dynamics of a hydrogenated silica xerogel: a neutron scattering study”
Phys. Rev. B **74**, 172304 (2006)

- 69) *S. Caponi, A. Fontana, M. Mattarelli, M. Montagna and F. Rossi*
 “The influence of the fictive temperature and the OH content on the dynamical properties of vitreous silica: comparison of Raman, Brillouin and neutron scattering spectra”
J. Phys.: Condens. Matter **19**, 205149 (2007)
- 70) *B. Rossi, P. Verrocchio, G. Viliani, G. Scarduelli, I. Mancini, G. Guella and F. Rossi*
 “Vibrational dynamics of inclusion complexes by Raman scattering: an experimental and numerical study”
Philosophical Magazine **87**, 559 (2007)
- 71) *S. Caponi, A. Fontana, F. Rossi, G. Baldi and E. Fabiani*
 “Effect of temperature on the vibrational density of states in vitreous SiO₂: A Raman study”
Phys. Rev B **76**, 092201 (2007)
- 72) *M. Mattarelli, S. Caponi, A. Chiappino, M. Montagna, E. Moser, F. Rossi, C. Tosello, C. Armellini, A. Chiasera, M. Ferrari, Y. Jestin, G. Nunzi Conti, S. Pelli and G.C. Righin*
 “Diagnostic techniques for photonic materials based on Raman and Brillouin spectroscopies”
Optoelectronics Letters **3**, 0188 (2007)
- 73) *A. Fontana, F. Rossi, G. Villani, S. Caponi, E. Fabiani, G. Baldi, G. Rocco and R. Dal Maschio*
 “The Raman coupling function in disordered solids: a light and neutron scattering study on glasses of different fragilità”
J. Phys: Condens. Matter **19**, 205145 (2007)
- 74) *M. Ivanda, K. Furić, S. Musić, M. Ristić, M. Gotić, D. Ristić, A.M. Tonejc, I. Djerdj, M. Mattarelli, M. Montagna, F. Rossi, M. Ferrari, A. Chiasera, Y. Jestin, G. C. Righini, W. Kiefer, R.R. Gonçalves*
 “Low Wavenumber Raman Scattering of Nanoparticles and Nanocomposite Materials”,
Journal of Raman Spectroscopy **38** (2007) pp 647-659.
- 75) *F. Rossi, C. Armellini, S. Caponi, A. Fontana, F. Scarpa*
 “A link between quasi-elastic scattering and sound attenuation in Silver phosphate glasses”
Philosophical Magazine **33-35**, 4079 (2008)
- 76) *L. Orsingher, M. Cavicchio, G. Carini Jr, R. Dal Maschio, D. Fioretto, A. Fontana, P. Fumagalli, E. Gilioli, M. Matterelli, E. Moser, F. Rossi*
 “Optical and spectroscopic characterization of permanently densified GeO₂ glasses”
Philosophical Magazine **33-35**, 3907 (2008)
- 77) *M. Matterelli, M. Montagna, F. Rossi, C. Tosello, N.D. Afify, M. Bettinelli, A. Speghini, C. Armellini, Y. Jestin, F. Rocca, S. Gialanella*
 “Raman and Eu³⁺ spectroscopy of hafnia single crystals and nanocrystals”
Optical Materials (2009)
- 78) *S. Caponi, S. Corezzi, D. Fioretto, A. Fontana, G. Monaco, and F. Rossi*
 “Raman-Scattering Measurements of the Vibrational Density of States of a Reactive Mixture During Polymerization: Effect on the Boson Peak”
Physical Review Letters **102**, 027402 (2009)
- 79) *G. Baldi, A. Fontana, G. Monaco, L. Orsingher, S. Rols, F. Rossi, B. Ruta*
 “Connection between boson peak and elastic properties in silicate glasses”
Physical Review Letters **102**, 195502 (2009)
- 80) *M. Zanatta, G. Baldi, S. Caponi, A. Fontana, E. Gilioli, M. Krish, C. Masciovecchio, G. Monaco, L. Orsingher, F. Rossi, G. Ruocco, R. Verben*
 “Elastic properties in permanently densified silica: a Raman, Brillouin light and X-ray scattering study”
Physical Review B, Condensed Matter and Materials Physics, vol. **81**, p. 212201-1-212201-4, (2010).
- 81) *S. Caponi, S. Corezzi, D. Fioretto, A. Fontana, G. Monaco, F. Rossi*
 “Effect of polymerization on the boson peak, from liquid to glass”
Journal of Non-Crystalline Solids, ISSN: 0022-3093, doi: 10.1016/j.jnoncrysol.2010.06.069 (2010).

- 82) *Rossi B, Comez L, Lupi L, Caponi S, Rossi F.*
 “Vibrational Properties of Cyclodextrin - Water Solutions Investigated by Low-Frequency Raman Scattering: Temperature and Concentration Effects”
 FOOD BIOPHYSICS, vol. 6, p. 227-232, ISSN: 1557-1858 (2011).
- 83) *Rossi F, Baldi G, Caponi S, Dal Maschio R, Fontana A, Orsingher L, Zanatta M*
 “The vibrational dynamics of GeO₂ at the glass transition: a Raman and Brillouin scattering study”
 PHILOSOPHICAL MAGAZINE, vol. 91, p. 1910-1916, ISSN: 1478-6435 (2011).
- 84) *Caponi S, A. Fontana, F. Rossi, M. Zanatta*
 “Influence of temperature on quasi-elastic scattering in GeO₂ glass”
 PHILOSOPHICAL MAGAZINE, vol. 91, p. 1887-1893, ISSN: 1478-6443 (2011).
- 85) *Rossi B., Comez L., Fioretto D., Lupi L, Caponi S, Rossi F*
 “Hydrogen bonding dynamics of cyclodextrin-water solutions by depolarized light scattering”
 JOURNAL OF RAMAN SPECTROSCOPY, vol. 42, p. 1479-1483, ISSN: 0377-0486 (2011).
- 86) *Caponi S, Corezzi S, Fioretto D, Fontana A, Monaco G, Rossi F*
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DIDATTICA

Esercitatore corso “*Laboratorio di Fisica II*”: dall’a.a. 1996/97 all’a.a. 2012/13

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Esercitatore corso “*Ottica*”: dall’a.a. 2004/05 all’a.a. 2007/08

Esercitatore corso “*Laboratorio di Fisica III*”: dall’a.a. 2011/12 all’a.a. 2012/13