

CURRICULUM VITAE



INFORMAZIONI PERSONALI

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Nazionalità	Italiana
Data di nascita	7 Aprile 1957

ESPERIENZA LAVORATIVA

Esperienze professionali

Dal 2004 ad oggi

PROFESSORE ORDINARIO SSD CHIM/08 CHIMICA FARMACEUTICA

Titolare dei corsi di

Chimica Farmaceutica 1 per il corso di Laurea in CTF

Problematiche analitiche e validazione per il Master di II Livello in Preformulazione e Sviluppo Galenico

Analisi dei farmaci e procedure di convalida (2 CFU), insegnamento obbligatorio per il Master di II Livello in Tecnologie farmaceutiche e attività regolatorie

Esercitazioni su Analisi Farmaceutica per il corso di Laurea in Farmacia

Dal 2006

Editor di Chromatographia dal 2006

1998-2003

PROFESSORE ASSOCIATO SSD CHIM/08 CHIMICA FARMACEUTICA

Titolare dei corsi di Analisi dei Medicinali 2, GLP e sistemi di qualità, Accredитamento e convalida per il corso di Laurea in CTF

Problematiche analitiche e validazione (2 CFU), per il Master di II Livello in Preformulazione e Sviluppo Galenico

1983 – 1997

RICERCATORE DEL SSD CHIM/08 CHIMICA FARMACEUTICA

Svolgimento di Laboratori di Analisi Farmaceutica, titolare dei corsi di Complementi di Chimica Tossicologica e Chimica Tossicologica

ISTRUZIONE E FORMAZIONE

Titolo di studio

*Corso di laurea in Chimica e Tecnologia Farmaceutiche
Università di Pavia*

Altri titoli di studio e professionali

Laurea in CTF 1981 riportando la votazione di 110/110 e lode.

Corso di Laurea in Farmacia

Laurea in Farmacia votazione di 110/110 e lode.

CAPACITÀ LINGUISTICHE.

PRIMA LINGUA

ITALIANO

ALTRE LINGUE

- Capacità di lettura
- Capacità di scrittura
- Capacità di espressione orale

Inglese

Eccellente

Buona

Francese

Buona

Buona

Greco Moderno

Sufficiente

Scarsa

Ottima

**CAPACITÀ E COMPETENZE
NELL'USO DI TECNOLOGIE**
*Con computer, attrezzature specifiche,
macchinari, ecc.*

Consolidata esperienza nella gestione di strumentazione analitica ed interpretazione dati cromatografici, sviluppo di piattaforme analitiche utili nel drug discovery e negli studi di caratterizzazione di proteine .
Uso professionale dei software di Office (word, excell, powerpoint)

**ALTRO / CAPACITÀ E
COMPETENZE**
*Competenze non precedentemente
indicate.*

Competenze didattiche e di ricerca anche maturate in contesti di paesi europei

Pubblicazioni

Vedi elenco allegato

Altri titoli

Coordinatore del Dottorato in CTF

ALLEGATI

[PUBBLICAZIONI]

Publications Gabriella Massolini

- 1) Determinazione dell'acido deidroacetico in preparati cosmetici mediante HPLC; A.Baruffini, G. Caccialanza, C. Gandini, G. Massolini; *Cosmetics & Toiletries Ed. It.*, **2**, 39-42 (1985).
- 2) Sull'attività fitotossica di alcune n-etil-naftilacilamidi; M.L.Carmellino, G. Massolini, G. Pagani; *Il Farmaco Ed.Sc.* **41**, 308-311 (1986).
- 3) Derivati del 4-(p.clorobenzoil)fenolo ad attività antifungina fitoiatrica; G. Massolini, M.L. Carmellino, A. Baruffini; *Il Farmaco Ed. Sc.* **41**, 381-387 (1986).
- 4) Derivati del 4-(p.ter.butilbenzoil)fenolo ad attività antifungina fitoiatrica; G.Massolini, M.L. Carmellino; *Il Farmaco Ed. Sc.* **41**, 984-990 (1986).
- 5) Sull'attività antifungina fitoiatrica di alcune benzofenonossime; G.Massolini, M.L. Carmellino, A. Baruffini; *Il Farmaco Ed. Sc.* **42**, 117-124 (1987).
- 6) Sull'attività antifungina fitoiatrica di alcuni derivati 2-iodobenzanilidici; M.L. Carmellino, G. Massolini; *Il Farmaco Ed. Sc.* **42**, 231-235 (1987).
- 7) Studio dell'attività antifungina fitoiatrica di derivati del 2- e del 4-amminofeniltioacetoneitrile e del 4-ammino-feniltioacetato d'etile; M.L. Carmellino, G. Massolini; *Il Farmaco Ed. Sc.* **42**, 979-986 (1987).
- 8) Sull'attività antifungina fitoiatrica di 4-aroilanilidi; G. Massolini, M.L. Carmellino, A. Baruffini; *Il Farmaco Ed. Sc.* **43**, 507-515 (1988).
- 9) Sull'attività antifungina fitoiatrica di 3-aroilanilidi; G. Massolini, M.L. Carmellino, A. Baruffini; *Il Farmaco Ed. Sc.* **43**, 517-522 (1988).
- 10) Fungicidal activity of a series of phenyl-pyridyl ketoxi-mes and their O-acetyl-derivatives; G.Massolini, M. Kitsos, C. Gandini, G. Caccialanza; *Pestic. Sci.*, **26**, 209-214 (1989).
- 11) Nuovi derivati benzofenonici di possibile impiego come filtri solari; G.Massolini, A.Baruffini, M.Kitsos; *Cosmetics & Toiletries Ed. It.*, **3**, 28-30 (1989)
- 12) HPLC determination of K-hetacillin and Na-dicloxacillin in oily suspension; M.Kitsos, G.Massolini, C. Gandini,G.Caccialanza; *Boll. Chim. Farm.*, **128**, 229-231 (1989)
- 13) Liquid chromatographic analysis of phospholipids in washing from rabbit eustachian tube dipalmitoyl-phosphatidylethanolamine content; G.Caccialanza, C.Gandini, M.Kitsos, G.Massolini; *J. Pharm. Biom. Anal.* **7**, 1931-1935 (1989)
- 14) Fungicidal activity of some alkylthiosubstituted 2-iodo and 2-methylbenzanilides; M.L. Carmellino, G. Massolini, M. Pregnotato, G.Pagani; *Pestic. Sci.*, **28**, 1-6 (1990)

- 15) Herbicidal activity of some 4'-substituted 2-(4-benzoyl-phenoxy)alkanoic acids; G. Massolini, M.L. Carmellino, P.Borgna; *Il Farmaco Ed. Sc.* **45**, 263-268 (1990).
- 16) Contaminazione chimica rilevata in alcuni campioni di miele; C.Roggi, C.Gandini, M.Kitsos, G.Massolini, E.Orvini, G.Caccialanza, P.Barbieri; *L'Igiene Moderna* **93** (5), 721-737 (1990)
- 17) Insecticidal activity of 6-substituted 8-quinolinecarboxylic acids, some 8-quinolinecarboxylic acid esters and amides and of 8-quinolinecarboxaldehyde derivatives; M.L. Carmellino, G. Massolini, G. Pagani, A. Longoni; *Boll. Chim. Farm.*, **129** (5), 190-194 (1990).
- 18) Determination of gangliosides in parenteral dosage form by high performance liquid chromatography; C.Gandini, M. Kitsos, G. Massolini, E. De Lorenzi, A. Soldi, G. Caccialanza, G. Kirschner; *J. Pharm. Biom. Anal.*, **8**, 1063-1066 (1990).
- 19) Determination of 5-aminosalicylic acid and related compounds in raw materials and pharmaceutical dosage forms by HPLC; C. Gandini, G. Caccialanza, M. Kitsos, G. Massolini; *J. Chromatogr.*, **540**, 416-421 (1991).
- 20) High-performance liquid chromatography post-column derivatization with fluorescence detection to study the influence of ambroxol and dipalmitoylphosphatidyl-choline levels in rabbit Eustachian tube washings; M. Kitsos, C. Gandini, G. Massolini, E. De Lorenzi, G. Caccialanza; *J.Chromatogr.*, **553**, 1-6 (1991)
- 21) High-performance liquid chromatographic determination of α -tocopheryl nicotinate in cosmetic preparations; A. Baruffini, E. De Lorenzi, C. Gandini, M. Kitsos, G. Massolini; *J. Chromatogr.*, **593**, 95-97 (1992)
- 22) Design of chiral LC separation for calcium antagonists on α_1 -acid glycoprotein and ovomucoid columns; E.De Lorenzi, A.F.Fell, G.Caccialanza, G.Massolini, M.Kitsos; *J. Pharm. Bio. Anal.*, **10**, 909-915 (1992)
- 23) HPLC determination of pyroglutamic acid as a degradation product in parenteral amino acid formulations; C. Gandini, E. De Lorenzi, M. Kitsos, G. Massolini, G. Caccialanza; *Chromatographia*, **36**, 75-78 (1993).
- 24) Fungicidal activity of new o-derivatives of phenylpyridylketoximes; G. Massolini, M.L. Carmellino, M. Kitsos, A. Baruffini; *Il Farmaco Ed. Sci.*, **48**, 503-514 (1993)
- 25) Fungicidal and genotoxic activity of new substituted pyridazinones; M.L. Carmellino, G. Massolini, G. Pagani, F.Zani, G. Leri; *Il Farmaco*, **48**, 1427-1438 (1993)
- 26) Enantiomeric LC separation of calcium antagonists on protein-based chiral stationary phases; E.De Lorenzi, A.F. Fell, A.L.Holmes, G.Caccialanza, G.Massolini, C.Gandini, M.Kitsos, C.Ponci; *Chirality*, **5**, 622-626 (1993)
- 27) Determination of magnitude and enantioselectivity of ligand binding to rat and rabbit serum albumins using immobilized-protein high performance liquid chromatography stationary phases; G.Massolini, A.F. Aubry, A. McGann, I.W. Wainer; *Biochemical Pharmacology*, **46**, 1285-1293 (1993).

- 28) High performance liquid chromatographic determination of pyroglutamic acid in cosmetic preparations; A.Baruffini, G. Massolini, C.Gandini, *Il Farmaco*, **49**, 219-220 (1994).
- 29) Fungicidal activity of o-esters of benzophenone oximes; G.Massolini, M.L.Carmellino, A.Baruffini, *Il Farmaco*, **49**, 63-67 (1994).
- 30) Egg yolk riboflavin binding protein as a new chiral stationary phase in high-performance liquid chromatography; G. Massolini, E. De Lorenzi, M.C. Ponci, C. Gandini, G.Caccialanza, H.L.Monaco, *J.Chromatogr.A*, **704**, 55-65 (1995).
- 31) HPLC determination of urinary 2,4- and 2,6-toluendiamines as potential degradation products of polyurethane breast implants. E.De Lorenzi, G.Massolini, M.Macchia, G.Caccialanza, *Chromatographia*, **41**, 661-664 (1995).
- 32) Fungicidal activity of arylfurylketoximes; G. Massolini, M.L.Carmellino, A.Baruffini, *Il Farmaco*, **51**, 287-292 (1996).
- 33) Evaluation of stereoselective dissolution of verapamil hydrochloride from matrix tablets press-coated with chiral excipients; L.Maggi, E. De Lorenzi, G.Massolini, G.Caccialanza e U.Conte *International Journal of Pharmaceutics*, **136**, 43-52 (1996).
- 34) Comparison of drug binding sites on rat and human serum albumins using immobilized-protein stationary phases as a tool for the selection of suitable animal models in pharmacological studies; G.Massolini, E. De Lorenzi, M.C. Ponci, G.Caccialanza, *Bollettino Chimico Farmaceutico*, **135**, 382-386 (1996).
- 35) Evaluation of quail egg white riboflavin binding protein as a chiral selector in HPLC and CE, E. De Lorenzi, G: Massolini, D.K.Lloyd, H.L. Monaco, C.Galbusera, G.Caccialanza, *J.Chromatogr.A*, **790** (1997) 47-64.
- 36) Development of an ion-pair HPLC of 2,4- and 2,6-toluendiamines in human plasma, E. De Lorenzi, G. Massolini, C.Gandini, E.Calleri, G. Caccialanza, *Chromatographia*, **47** (1998) 84-88.
- 37) Evaluation of β -lactoglobulin as a stationary phase in high-performance liquid chromatography and as a buffer additive in capillary electrophoresis: observation of a surprising lack of stereo-selectivity, G: Massolini, E. De Lorenzi, D.K.Lloyd, A.M. McGann, G.Caccialanza, *J.Chromatogr.B*, **712** (1998) 83-94.
- 38) Evaluation of quail egg white riboflavin binding protein as a chiral selector in capillary electrophoresis by applying a modified partial filling technique. E.De Lorenzi, G.Massolini, M.Quaglia, C. Galbusera, G.Caccialanza *Electrophoresis* **20** (1999) 2739-2748.
- 39) Riboflavin binding proteins as chiral selectors in HPLC and CE. E.De Lorenzi, G.Massolini, *Pharmaceutical Science and Technology Today* (review article) **2**, (1999) 352-364.
- 40) Chromatografic investigation on the binding site characteristics of quail egg-white riboflavin binding protein as chiral stationary phase. G.Massolini, E.De Lorenzi, , E. Calleri, E Tabolotti, G.Caccialanza. *J.Chromatogr.B*, **738** (2000) 343-355

- 41) Affinity capillary electrophoresis is a powerful tool to identify transthyretin binding drugs for a potential therapeutic usage in amyloidosis. E.De Lorenzi, C.Galbusera, V. Bellotti, P.Mangione, G.Massolini, E.Tabolotti, A. Andreola, G.Caccialanza. *Electrophoresis*, 2000, 21, 3280-3289.
- 42) Properties of a stationary phase based on immobilised Chicken Liver basic Fatty Acid-Binding Protein. G. Massolini, E.De Lorenzi, E.Calleri, C. Bertucci, H.L.Monaco, M. Perduca, G.Caccialanza, I.W.Wainer. *J.Chromatogr.B*, 751 (2001) 117-130
- 43) Chiral capillary electrophoresis and nuclear magnetic resonance investigation on structure-enantioselectivity relationship in synthetic cyclopeptides as chiral selector. E. De Lorenzi, G. Massolini, P. Molinari, C. Galbusera, R. Longhi, C. Marinzi, R. Consonni and M: Chiari, *Electrophoresis* 2001, 22, 1373-1384
- 44) Immobilized Penicillin G Acylase as reactor and chiral selector in liquid chromatography. G. Massolini, E.Calleri, E.De Lorenzi, M.Pregnotato, M.Terreni, G.Felix, C.Gandini, *J.Chromatogr.A*, 921 (2001) 147-160
- 45) Surface initiated molecularly imprinted polymer films: a new approach in chiral capillary electrochromatography. M.Quaglia, E.De Lorenzi, C.Sulitzky, G.Massolini and B.Sellergren *Analyst*, 2001, 126, 1495-1498.
- 46) Optimisation and validation of a capillary electrophoresis method for the simultaneous determination of diazepam and otilonium bromide. S. Furlanetto, S. Orlandini, G. Massolini, M.T. Faucci, E. La Porta and S. Pinzauti, *Analist*, 2001, 126, 1700-1706.
- 47) Capillary electrophoresis investigation of a partially unfolded conformation of β_2 -microglobulin. E.De Lorenzi, S.Grossi, G.Massolini, S.Giorgetti, P.Mangione, A.Andreola, F.Chiti, V. Bellotti, G.Caccialanza.. *Electrophoresis*, 23 (2002) 918-925.
- 48) Riboflavin Binding Protein Chiral Stationary Phase: Investigation on the Retention Mechanism. E Calleri, E. De Lorenzi, D. Siluk, M. Markuszewski, R. Kaliszan, G. Massolini. *Cromatografia* 55 (2002) 651-658.
- 49) Evaluation of a penicillin g acylase based chiral stationary phase towards a series of 2-aryloxyalkanoic acids, isosteric analogs and 2-arylpropionic acids. E. Calleri, G. Massolini, F. Loiodice, G. Fracchiolla, C. Temporini, G. Félix, P. Tortorella, G. Caccialanza *J. Chromatogr. A*, 958 ((2002) 131-140
- 50) Enantioseparation of tetramisole by capillary electrophoresis and high performance liquid chromatography and application of these techniques to enantiomeric purity determination of a veterinary drug formulation of L-levamisole. Bezhan Chankvetadzea, Naira Burjanadzea, Matteo Santi, Gabriella Massolini, Gottfried Blaschkea, *J. Sep. Sci.* 2002, 25, 733-740
- 51) Validation of a RP-LC method for the simultaneous determination of isoniazid, pyrazinamide and rifampicin in a pharmaceutical formulations.E.Calleri, E.De Lorenzi, S.Furlanetto, G.Massolini, G.Caccialanza, *J.Pharm.Biomed.Anal.* 29, (2002) 1089-1096.

- 52) Enantioselective hydrolysis of some 2-aryloxyalkanoic acid methyl esters and isosteric analogs using a penicillin G acylase based HPLC monolithic silica column. G.Massolini, E.Calleri, A.Lavecchia, F.Loiodice, D.Lubda, C.Temporini, G.Fracchiolla, P.Tortorella, E.Novellino, G.Caccialanza. *Anal.Chem.*, 2003, 75, 535-542.
- 53) Lipases for biocatalysis: development of a chromatographic bioreactor. E.Calleri, C.Temporini, S.Furlanetto, F.Loiodice, G.Fracchiolla, G.Massolini. *J. Pharm.Biomed. Anal.*, 32 (2003) 715-724.
- 54) G. Massolini , E.Calleri A survey of binding properties of fatty acid-binding proteins. Chromatographic methods. Review article, *J.Chrom. B.*, 797, 1-2, 255-268, 2003
- 55) Evaluation of a Monolithic Epoxy Silica-Rod Support for Penicillin G Acylase Immobilization. E. Calleri, G. Massolini, D. Lubda, C. Temporini, F. Loiodice, G. Caccialanza *J.Chromatogr. A.*, 2004, 1031, 93-100.
- 56) Penicillin G Acylase-based stationary phases: analytical applications. Review article E. Calleri, C. Temporini, G. Massolini, G. Caccialanza. *J.Pharm. Biomed. Anal.* . 2004, 35, 243-258.
- 57) Development of a chromatographic bioreactor based on immobilized β -glucuronidase on monolithic support for the determination of dextromethorphan and dextrorphan in human urine. E. Calleri, G. Marrubini, G. Massolini, S.S. de Fazio, S. Furlanetto, I.W. Wainer, L. Manzo, G. Caccialanza *J. Pharm. Biomed.Anal* 35, 2004, 1179-1189.
- 58) E. Calleri, C. Temporini, E. Perani, C. Stella, S. Rudaz, D. Lubda, G. Mellerio, J.-L. Veuthey, G. Caccialanza, G. Massolini. Development of a bioreactor based on trypsin immobilized on monolithic support for the on-line digestion and identification of proteins. *J. Chromatogr. A*, 2004,1045, 99-109.
- 59) G. Massolini, E. Calleri. Immobilized trypsin systems coupled on-line to separation methods: recent developments and analytical applications. Review. *J. Sep. Sci.*, 2005, 28, 7-21.
- 60) E. Calleri, C. Temporini, E. Perani, A. De Palma, D. Lubda, G. Mellerio, A. Sala, M. Galliano, G. Caccialanza, G. Massolini. Trypsin-based monolithic bioreactor coupled on-line with LC/MS/MS system for protein digestion and variant identification in standard solution and serum samples, *J. Prot. Res.* 2005, 4, 481-490
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- 62) C. Temporini, E. Perani, F. Mancini, M. Bartolini, E. Calleri, D. Lubda, G. Felix, V. Andrisano, G. Massolini. Optimisation of a trypsin-bioreactor coupled with high-performance liquid chromatography-electrospray ionization tandem mass spectrometry for quality control of biotechnological drugs. *J. Chromatogr.*, A 2006, 1120, 121-131.
- 63) G. Massolini, G. Fracchiolla, E. Calleri, G. Carbonara, C. Temporini, A. Lavecchia, S. Cosconati, E. Novellino, F. Loiodice. Elucidation of the enantioselective recognition

mechanism of a penicillin G acylase-based chiral stationary phase towards a series of 2-aryloxy-2-aryl-acetic acids. *Chirality*, 2006, 18 :633-643

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- 66) Caterina Temporini, Eleonora Perani, Enrica Calleri, Lorenzo Dolcini, Dieter Lubda, Gabriele Caccialanza, Gabriella Massolini. Pronase-Immobilized Enzyme Reactor: a New Approach for Automation in Glycoprotein Analysis by LC/LC-ESI/MSⁿ. *Anal. Chem*, 2007, 79, 355-363.
- 67) E. Calleri, G. Marrubini, G. Brusotti, G. Massolini, G. Caccialanza Development and integration of an immunoaffinity monolithic disk for the on-line solid-phase extraction and HPLC determination with fluorescence detection of aflatoxin B1 in aqueous solutions. *J Pharm. Biomed. Anal.* 44 (2007) 396-403.
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- 70) C. Temporini, E. Calleri, D. Campese, K. Cabrera, G. Felix, G. Massolini. Chymotrypsin immobilization on epoxy monolithic silica columns: development and characterization of a bioreactor for protein digestion. *J Sep Sci*, 2007, 30, 3069-3076.
- 71) T. Baczek, C. Temporini, E. Perani, G. Massolini and R. Kaliszan. Identification of peptides in proteomics supported by prediction of peptide retention by means of quantitative structure-retention relationships. *Acta Chromatogr.* 2007, 18, 72-92. (IF 0.621)
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- 75) G. Massolini, C. Temporini, E. Calleri. Penicillin G acylase as chiral selector in LC and CE: exploring the origins of enantioselectivity. *J. Chromatogr. B*, 875 (2008) 20–29.(Review Article).
- 76) C. Temporini, S. Ceruti, E. Calleri, S. Ferrario, R. Moaddel, M.P. Abbracchio, G. Massolini. Development of an immobilized GPR17 receptor-stationary phase for binding determination using frontal affinity chromatography coupled to mass spectrometry. *Analytical Biochemistry*. 384 (2009) 123-129.
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- 78) E. Calleri, C. Temporini, G. Caccialanza, G. Massolini. Target-Based Drug-Discovery: the Emerging Success of Frontal Affinity Chromatography Coupled to Mass Spectrometry. Review article. *ChemMedChem* (2009) Jun;4(6):905-16 (IF 3.150).
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- 80) Giorgio Marrubini, Bolivar Enrique Castillo Mendoza, Gabriella Massolini Separation of purine and pyrimidine bases and nucleosides by hydrophilic interaction chromatography (HILIC). *J. Sep. Sci.* 2010, 33, 1–14 (IF 2.746) .
- 81) Frontal Affinity Chromatography-Mass Spectrometry Useful for Characterization of New Ligands for GPR17 Receptor Enrica Calleri, Stefania Ceruti, Gloria Cristalli, Claudia Martini, Caterina Temporini, Chiara Parravicini, Rosaria Volpini, Simona Daniele, Gabriele Caccialanza, Davide Lecca, Catia Lambertucci, Maria Letizia Trincavelli, Gabriella Marucci, Irving W. Wainer, Graziella Ranghino, Piercarlo Fantucci, Maria P. Abbracchio, Gabriella Massolini *J. Med. Chem.* 2010, 53, 3489-3501. (IF 4.898).
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- 86) Frontal affinity chromatography with MS detection of the ligand binding domain of PPAR gamma receptor: ligand affinity screening and stereoselective ligand-macromolecule interaction. *J. Chrom A.*, 2012, 1232, 84-92 (IF 2011 4.194)
- 87) Chiral Capillary Liquid Chromatography based on Penicillin G Acylase Immobilized on Monolithic Epoxy Silica Column. Roberto Gotti, Jessica Fiori, Enrica Calleri, Caterina Temporini, Dieter Lubda, Gabriella Massolini, *J. Chromatogr.A*, 2012, 1234 45-49 (IF 4.194).
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