

Istituto di Chimica del Riconoscimento Molecolare – C.N.R.

PUBBLICAZIONI 2013

Modulo "Applicazioni sintetiche della biocatalisi" (PM.P03.009.002)

Responsabile: Dott. Gianluca OTTOLINA

1. A. Natalello, F. Sasso, **F. Secundo**
"Enzymatic transesterification monitored by an easy-to-use fourier transform infrared spectroscopy method"
Biotechnol. J. 8: 133-138 (2013) (I.F. 3.446)
2. **F. Secundo**
"Conformational changes of enzymes upon immobilization"
Chem. Soc. Rev., 42: 6250-6261 (2013) (I.F. 24.892)
3. T. Kulschewskia, F. Sasso, **F. Secundo**, M. Lotti, J. Pleiss
"Molecular mechanism of deactivation of *C. antarctica* lipaseB by methanol"
J. Biotechnol., 168: 462-469 (2013) (I.F. 3.183)
4. **S. Riva**
"1983-2013: the long wave of biocatalysis"
Trends in Biotechnol. 31: 120-121 (2013) (I.F. 9.660)
5. V.V. Kollerov, D. Monti, N.O. Deshcherevskaya, T.G. Lobastova, **E.E. Ferrandi**, A. Larovere, S.A. Gulevskaya, **S. Riva**, M.V. Donova
"Hydroxylation of lithocholic acid by selected actinobacteria and filamentous fungi"
Steroids 78: 370-378 (2013) (I.F. 2.803)
6. J. Krejzova, P. Simon, E. Vavrikova, K. Slamova, H. Pelantova, **S. Riva**, V. Spiwok, V. Kren
"Enzymatic synthesis of new C-6-acylated derivatives of NAG-thiazoline and evaluation of their inhibitor activities towards fungal beta-N-acetylhexosaminidase"
J. Mol. Catal. B-Enzymatic. 87: 128-134 (2013) (I.F. 2.823)
7. **E. Brenna**, S.L. Cosi, **E.E. Ferrandi**, F.G. Gatti, **D. Monti**, F. Parmeggiani, A. Sacchetti
"Substrate scope and synthetic applications of the enantioselective reduction of alpha-alkyl-beta-arylenones mediated by old yellow enzymes"
Org. Biomol. Chem. 11: 2988-2996 (2013) (I.F. 3.568)
8. **E. Brenna**, F.G. Gatti, A. Manfredi, **D. Monti**, F. Parmeggiani
"Old yellow enzyme-mediated reduction of beta-cyano-alpha, beta-unsaturated esters for the synthesis of chiral building blocks: stereochemical analysis of the reaction"
Catal. Sci. Technol., 3: 1136-1146 (2013) (I.F. 3.753)
9. **E. Brenna**, F.G. Gatti, L. Malpezzi, **D. Monti**, F. Parmeggiani, A. Sacchetti
"Synthesis of robalzotan, ebalzotan, and rotigotine precursors via the stereoselective multienzymatic cascade reduction of α,β -unsaturated aldehydes"
J. Org. Chem., 78: 4811-4822 (2013) (I.F. 4.564)
10. **S. Serra**
"An expedient preparation of enantio-enriched ambergris odorants starting from commercial ionone alpha"
Flavour Fragr. J., 28: 46-52 (2013) (I.F. 1.824)
11. **S. Serra**
"Enantioselective synthesis of natural trinosesquiterpene tetralones by chemo-enzymatic approaches"
Nat. Prod. Commun., 8: 863-868 (2013) (I.F. 0.956)

12. M. Falconi, S. Ciccone, P. D'Arrigo, **F. Viani**, R. Sorge, G. Novelli, P. Patrizi, A. Desideri, S. Bicocca
 "Design of a novel LOX-1 receptor antagonist mimicking the natural substrate"
Biochem. Bioph. Res. Co., 438: 340-345 (2013) (I.F. 2.406)
13. F. Castiglione, V. Crupi, D. Majolino, **A. Mele**, **W. Panzeri**, B. Rossi, F. Trotta, V. Venuti
 "Vibrational dynamics and hydrogen bond properties of β -CD nanosponges: an FTIR-ATR, Raman and solid-state NMR spectroscopic study"
J. Incl. Phenom. Macro. 75: 247-254 (2013) (I.F. 1.411)
14. M. Galletta, S. Scaravaggi, E. Macerata, A. Famulari, **A. Mele**, **W. Panzeri**, F. Sansone, A. Casnati, M. Mariani
 "2,9-Dicarbonyl-1,10-phenanthroline derivatives with an unprecedented Am(III)/Eu(III) selectivity under highly acidic conditions"
Dalton T., 42: 16930-16938 (2013)
15. A. Chiappe, A. Sanzone, D. Mendola, F. Castiglione, A. Famulari, G. Raos, **A. Mele**
 "Pyrazolium-versus imidazolium-based ionic liquids: structure, dynamics and physicochemical properties"
J. Phys. Chem. B, 117: 668-676 (2013) (I.F. 3.607)
16. F. Castiglione, R. Simonutti, M. Mauri, **A. Mele**
 "Cage-like local structure of ionic liquids revealed by a ^{129}Xe chemical shift"
J. Phys. Chem. Lett., 4: 1608-1612 (2013) (I.F. 6.585)
17. S. Banfi, **G. Nasini**, S. Zaza, E. Caruso
 "Synthesis and photo-physical properties of a series of BODIPY dyes"
Tetrahedron, 69: 4845-4856 (2013) (I.F. 2.803)

Modulo "Trasformazioni biocatalizzate di materiali di origine vegetale"

(PM.P03.004.004)

Responsabile: Dott. Gianluca OTTOLINA

18. **S. Gandolfi**, **G. Ottolina**, **S. Riva**, **G. Pedrocchi-Fantoni**, **I. Patel**
 "Complete chemical analysis of Carmagnola hemp hurds and structural features of its components"
Bioresources 8: 2641-2656 (2013) (I.F. 1.309)
19. **S. Serra**, **A. A. Cominetti**
 "A divergent and stereoselective approach to phenolic 1,7-dihydroxy-bisabolane sesquiterpenes: asymmetric total synthesis of (+)-curcutetraol, (+)-sydonol, (+)-sydonic-acid, and (+)-7-O-methylsydonic acid"
Tetrahedron-Asymmetry, 24: 1110-1116 (2013) (I.F. 2.115)

Modulo "Sintesi di materiali funzionali e sviluppo di sistemi analitici miniaturizzati"

(PM.P06.003.001)

Responsabile: Dott.ssa Marcella CHIARI

20. S. Galbiati, **F. Damin**, P. Pinzani, I. Mancini, S. Vinci, **M. Chiari**, C. Orlando, L. Cremonesi, M. Ferrari
 "A new microarray substrate for ultra-sensitive genotyping of KRAS and BRAF gene variants in colorectal cancer"
Plos One 8: Issue 3, e59939 (2013) (I.F. 3.730)

21. **E. Albisetti**, D. Petti, M. Cantoni, **F. Damin**, A. Torti, **M. Chiari**, R. Bertacco
 “Conditions for efficient on-chip magnetic bead detection via magnetoresistive sensors”
Biosens. Bioelectron., 47: 213-217 (2013) (I.F. 5.437)
22. **P. Gagni**, **L. Sola**, **M. Cretich**, **M. Chiari**
 “Development of a high-sensitivity immunoassay for amyloid-beta 1-42 using a silicon microarray platform”
Biosens. Bioelectron., 47: 490-495 (2013) (I.F. 5.437)
23. **L. Sola**, **P. Gagni**, **M. Cretich**, **M. Chiari** .
 “Surface immobilized hydrogels as versatile reagent reservoirs for microarrays”
J. Immunol. Methods, 391: 95-102 (2013) (I.F. 2.225)
24. A. Ohlander, **C. Zilio**, T. Hammerle, S. Zelenin, G. Klink, **M. Chiari**, K. Bock, A. Russom
 “Genotyping of single nucleotide polymorphisms by melting curve analysis using thin film semi-transparent heaters integrated in a lab-on-foil system”
Lab. Chip., 13: 2075-2082 (2013) (I.F. 5.697)
25. F. Giavazzi, M. Salina, R. Cerbino, M. Bassi, D. Prospero, E. Ceccarello, **F. Damin**, **L. Sola**, M. Rusnati, **M. Chiari**, B. Chini, T. Bellini, M. Buscaglia
 “Multispot, label-free biodetection at a phantom plastic-water interface”
P. Nat. Acad. Sci., 110: 9350-9355 (2013) (I.F. 9.737)
26. G. Oliviero, **M. Chiari**, E. De Lorenzi, R. Colombo, **M. Cretich**, **F. Damin**, S. Federici, L.E. Depero, P. Bergese
 “Leveraging on nanomechanical sensors to single out active small ligands for β 2-microglobulin”
Sensor Actuat B-Chem, 176: 1026-1031 (2013) (I.F. 3.535)
27. E. Albisetti, D. Petti, **F. Damin**, **M. Cretich**, **M. Bagnati**, **L. Sola**, **M. Chiari**, R. Bertacco
 “Optimization of the bio-functionalized area of magnetic biosensors”
Eur. Phys. J. B, 86: 261 DOI : 10.1140/epjb/e2013-30676-4 (2013) (I.F. 1.282)
28. **M. Cretich**, **L. Sola**, **P. Gagni**, **M. Chiari**.
 “Novel fluorescent microarray platforms: a case study in neurodegenerative disorders”
Expert Rev. Mol. Diagn. 13: 863-73 (2013) (I.F. 4.089)

Modulo “Simulazioni molecolari di sistemi biologici”

(INT.P02.001.001)

Responsabile: Dott. Giorgio COLOMBO

29. P. Lassaux, **C. Peri**, M. Ferrer-Navarro, L.J. Gourlay, **A. Gori**, O. Conchillo-Solè, D. Rinchai, G. Lertmemongkolchai, **R. Longhi**, X. Daura, **G. Colombo**, M. Bolognesi
 “A structure-based strategy for epitope discovery in Burkholderia pseudomallei OppA antigen”
Structure 21: 167-175 (2013) (I.F. 5.994)
30. **C. Peri**, P. Gagni, F. Combi, **A. Gori**, **M. Chiari**, **R. Longhi**, **M. Cretich**, **G. Colombo**
 “Rational epitope design for protein targeting”
ACS Chem. Biol. 8: 397-404 (2013) (I.F. 5.442)
31. F. Curnis, A. Sacchi, **R. Longhi**, B. Colombo, A. Gasparri, A. Corti
 “IsoDGR-Tagged albumin: a new $\alpha\beta$ 3 selective carrier for nanodrug delivery to tumors”
Small 9: 673-678 (2013) (I.F. 7.823)

32. M. Loi, D. Di Paolo, M. Soster, C. Brignole, A. Bartolini, L. Emionite, J. Sun, P. Becherini, F. Curnis, A. Petretto, **M. Sani, A. Gori**, M. Milanese, C. Gambini, **R. Longhi**, M. Cilli, T.M. Allen, F. Bussolino, W. Arap, R. Pasqualini, A. Corti, M. Ponzoni, S. Marchiò, F. Pastorino
“Novel phage display-derived neuroblastoma-targeting peptides potentiate the effect of drug nanocarriers in preclinical settings”
J. Control. Release, 170: 233-241 (2013) (I.F. 7.633)
33. D. Lattuada, K. Crotta, N. Tonna, C. Casnici, R. Benfante, D. Fornasari, F. Bianco, **R. Longhi, O. Marelli**
“The expression of GHS-R in primary neurons is dependent upon maturation stage and regional localization”
Plos One, 8: issue 6-e64183 (I.F. 3.730)
34. **A. Gori, R. Longhi, C. Peri, G. Colombo**
“Peptides for immunological purposes: design, strategies and applications”
Amino Acids, 45: 257-268 (2013) (I.F. 3.914)
35. **M. Meli, G. Colombo**
“A Hamiltonian replica exchange molecular dynamics (MD) method for the study of folding, based on the analysis of the stabilization determinants of proteins”
Int. J. Mol. Sci., 14: 12157-12169 (2013) (I.F. 2.464)
36. **D. Corrada, G. Morra, G. Colombo**
“Investigating allostery in molecular recognition: insights from a computational study of multiple antibody-antigen complexes”
J. Phys. Chem. B., 117: 535-552 (2013) (I.F. 3.607)
37. H. Zhao, **E. Moroni**, B. Yan, **G. Colombo**, B.S.J. Blagg
“3D-QSAR-Assisted design, synthesis and evaluation of novobiocin analogues”
ACS Med. Chem. Lett., 4: 57-62 (2013) (I.F. 3.311)
38. L.J. Gourlay, **C. Peri**, M. Ferrer-Navarro, O. Conchillo-Solè, **A. Gori**, D. Rinchai, R.J. Thomas, O.L. Champion, S.L. Michell, C. Kewcharoenwong, A. Nithichanon, P. Lassaux, L. Perletti, **R. Longhi, G. Lertmemongkolchai, R.W. Titball, X. Daura, G. Colombo, M. Bolognesi**
“Exploiting the *Burkholderia pseudomallei* acute phase antigen BPSL2765 for structure-based epitope discovery/design in structural vaccinology”
Chem. Biol. 20: 1147-1156 (2013) (I.F. 6.157)
39. A. Ricupito, M. Grioni, A. Calcinotto, R.H. Michelini, **R. Longhi**, A. Mondino, M. Bellone
“Booster vaccinations against cancer are critical in prophylactic but detrimental in therapeutic settings”
Cancer Res., 73(12): 3545-3554 (2013) (I.F. 8.650)
40. **D. Corrada, G. Colombo**
“Energetic and dynamic aspects of the affinity maturation process: characterizing improved variants from the Bevacizumab antibody with molecular simulations”
J. Chem. Inform. Model. 53: 2937-2950 (2013) (I.F. 4.304)

Modulo "Targeting e inibizione dell'angiogenesi per la terapia anti-cancro"

(PM.P01.021.004)

Responsabile: Dott. Matteo ZANDA

41. S. P. Shankar, M. Jagodzinska, L. Malpezzi, P. Lazzari, I. Manca, I.R. Greig, **M. Sani, M. Zanda**
“Synthesis and structure-activity relationship studies of novel tubulysin U analogues – effect on cytotoxicity of structural variations in the tubovaline fragment”
Org. Biomol. Chem. 11: 2273-2287 (2013) (I.F. 3.568)

42. M.F.F.A. Arnold, A.F. Haag, S. Capewell, H.I. Boshoff, E.K. James, R. McDonald, I. Mair, A.M. Mitchell, B. Kerscher, T.J. Mitchell, P. Mergaert, C.E. Barry III, M. Schocchi, **M. Zanda**, D.J. Campopiano, G.P. Ferguson
 “Paternal complementation of *Sinorhizobium meliloti* bacA mutant phenotypes by the *Mycobacterium tuberculosis* BacA protein”
J. Bacteriol., 195: 389-398 (2013) (I.F. 3.194)
43. D. Pezzoli, **M. Zanda**, R. Chiesa, G. Candiani
 “The yin of exofacial protein sulfhydryls and the yang of intracellular glutathione in vitro transfection with SS14 bioreducible lipoplexes”
J. Control. Release, 165: 44-53 (2013) (I.F. 7.633)
44. S. Perrone, M. Usai, P. Lazzari, S.J. Tucker, H.M. Wallace, **M. Zanda**
 “Efficient cell transfection with melamine-based gemini surfactants”
Bioconjugate Chem., 24: 176-187 (2013) (I.F. 4.580)
45. A.F. Haag, M.F.F. Arnold, K. Myka, B. Kerscher, S. Dall’Angelo, **M. Zanda**, P. Mergaert, G.P. Ferguson
 “Molecular insights into bacteroid development during *Rhizobium*-legume symbiosis”
Fems Microbiol. Rev., 37: 364-383 (2013) (I.F. 13.231)
46. I. Manca, A. Mastinu, F. Olimpieri, M. Falzoi, **M. Sani**, S. Ruiu, G. Loriga, A. Volonterio, S. Tambaro, M.E. Heiner Bottazzi, **M. Zanda**, G.A. Pinna, P. Lazzari
 “Novel pyrazole derivatives as neutral CB₁ antagonists with significant activity towards food intake”
Eur. J. Med. Chem., 62: 256-269 (2013) (I.F. 3.499)
47. S. Frau, S. Dall’Angelo, G.L. Baillie, R.A. Ross, M. Pira, C. Tseng, P. Lazzari, **M. Zanda**
 “Pyrazole-type cannabinoid ligands conjugated with fluoro-deoxy-carbohydrates as potential PET-imaging agents: synthesis and CB₁/CB₂ receptor affinity evaluation”
J. Fluorine Chem., 152: 166-172 (2013) (I.F. 1.939)
48. P. Sreejith Shankar, S. Bigotti, P. Lazzari, I. Manca, M. Spiga, **M. Sani**, **M. Zanda**
 “Synthesis and cytotoxicity evaluation of diastereoisomers and N-terminal analogues of tubulosin-U”
Tetrahedron Lett., 54: 6137-6141 (2013) (I.F. 2.397)
49. C. Zanato, A. Testa, **M. Zanda**
 “Improved synthesis of the hypoxia probe 5-deutero-5-fluoro-5-deoxy-azomycin arabinoside (FAZA) as a model process for tritium radiolabeling”
J. Fluorine Chem., 155: 110-117 (2013) (I.F. 1.939)
50. S. Tambaro, R. Reali, A. Volonterio, **M. Zanda**, F. Olimpieri, G. Aimè Pinna, P. Lazzari
 “NESS002ie: A new fluorinated thiol endopeptidase inhibitor with antinociceptive activity in an animal model of persistent pain”
Pharmacol. Biochem. Be., 110: 137-144 (2013) (I.F. 2.608)

Modulo “Modellistica molecolare di proteine legate a processi patologici”

(PM.P01.026.002)

Responsabile: Dott.ssa Maria Cristina DE ROSA

51. M. Bozzi, E. Di Stasio, G.L. Scaglione, **C. Desiderio**, C. Martelli, **B. Giardina**, **F. Sciandra**, **A. Brancaccio**
 “Probing the stability of the “naked” mucin-like domain of human α -dystroglycan”
BMC Biochem., 14: 15 (2013) (I.F. 1.776)

52. S. Ficarra, F. Misiti, A. Russo, C. Carelli-Alinovi, E. Bellocco, D. Barreca, G. Laganà, U. Leuzzi, G. Toscano, **B. Giardina**, A. Galtieri, E. Tellone
 “Antiepileptic carbamazepine drug treatment induces alteration of membrane in red blood cells: possible positive effects on metabolism and oxidative stress”
Biochimie, 95: 833-841 (2013) (I.F. 3.142)
53. **A. Brancaccio**
 “Increased levels of expression of dystroglycan may protect the heart”
Neuromuscular Disord., 23: 867-870 (2013) (I.F. 3.464)
54. **F. Sciandra**, M. Bozzi, M.G. Bigotti, **A. Brancaccio**
 “The multiple affinities of α -dystroglycan”
Curr Protein Pept Sc., 14: 626-634 (2013) (I.F. 2.326)
55. **M.E. Clementi**, **B. Sampaolese**, D. Triggiani, A. Tiezzi, **B. Giardina**
 “S100b protects IMR-32 cells against Ab(1-42) induced neurotoxicity via modulation of apoptotic genes expression”
Advances in Alzheimer's Disease, 2: 99-108 (2013)

Modulo "Proteomica salivare"

(PM.P06.008.002)

Responsabile: Dott. Alberto VITALI

56. T. Cabras, F. Iavarone, D. Pirolli, **M.C. De Rosa**, **A. Vitali**, G. Faa, M. Cordaro, I. Messina, J. Ekstrom, **M. Castagnola**
 “Top-down HPC-ESI-MS characterization of rat gliadoralin A, new member of the family of rat submandibular gland glutamine-rich proteins and potential substrate of transglutaminase”
J. Sep. Sci., 36: 2848-2861 (2013) (I.F. 2.591)
57. S. Conti, G. Radicioni, T. Ciotola, **R. Longhi**, L. Polonelli, R. Gatti, T. Cabras, I. Messina, **M. Castagnola**, **A. Vitali**
 “Structural and functional studies on a proline-rich peptide isolated from swine saliva endowed with antifungal activity towards *Cryptococcus neoformans*”
BBA-Biomembranes, 1828: 1066-1074 (2013) (I.F. 3.389)
58. D.V. Rossetti, C. Martelli, **R. Longhi**, F. Iavarone, **M. Castagnola**, **C. Desiderio**
 “Quantitative analysis of thymosin β 4 in whole saliva by capillary electrophoresis-mass spectrometry using multiple ions monitoring (CE-MIM-MS)”
Electrophoresis, 34: 2674-2682 (2013) (I.F. 3.261)
59. **C. Desiderio**, C. Martelli, D.V. Rossetti, C. Di Rocco, L. D'Angelo, M. Caldarelli, G. Tamburrini, F. Iavarone, **M. Castagnola**, I. Messina, T. Cabras, G. Faa”
 “Identification of thymosins β 4 and β 10 in paediatric craniopharyngioma cystic fluid”
Child. Nerv. Syst., 29: 951-960 (2013) (I.F. 1.241)
60. G. Spagnuolo, **C. Desiderio**, V. Riviaccio, M. Amato, D.V. Rossetti, V. D'Antò, H. Schweickl, **A. Lupi**, S. Rengo, **G. Nocca**
 “In vitro cellular detoxification of triethylene glycol dimethacrylate by adduct formation with N-acetylcysteine”
Dent. Mater., 29: e153-e160 (2013) (I.F. 3.773)
61. G. Maisetta, **A. Vitali**, M.A. Scorciapino, A.C. Rinaldi, R. Petruzzelli, F.L. Brancatisano, S. Esin, A. Stringaro, M. Colone, C. Luzi, A. Bozzi, M. Campa, G. Batoni
 “pH-dependent disruption of *Escherichia coli* ATCC 25922 and model membranes by the human antimicrobial peptides hepcidin 20 and 25”
Febs J., 280: 2842-2854 (2013) (I.F. 4.250)

62. I. Daidone, M. Aschi, **M. Patamia**, A. Bozzi, R. Petruzzelli
 “Structural and dynamical properties of KTS-disintegrins: a comparison between Obtustatin and Lebestatin.”
Biopolymers, 99: 47-54 (2013) (I.F. 2.879)
63. A. Urbani, **M. Castagnola**, M. Fasano, L. Bini, A. Modesti, A.M. Timperio, P. Roncada
 “Digital and analogical reality in proteomics investigation”
Mol. Biosyst., 9: 1062-1063 (2013) (I.F. 3.350)
64. I. Messina, T. Cabras, F. Iavarone, F. Vincenzoni, A. Urbani, **M. Castagnola**
 “Unraveling the different proteomic platforms”
J. Sep. Sci., 36: 128-139 (2013) (I.F. 2.591)
65. F. Iavarone, T. Cabras, E. Pisano, M.T. Sanna, S. Nemolato, G. Vento, C. Tirone, C. Romagnoli, M. Cordaro, V. Fanos, G. Faa, I. Messina, **M. Castagnola**
 “Top-down HPLC-ESI-MS detection of S-glutathionylated and S-cysteinylylated derivatives of cystatin B and its 1-53 and 54-98 fragments in whole Saliva of human preterm newborns”
J. Proteome Res., 12: 917-926 (2013) (I.F. 5.056)
66. P.de Sousa-Pereira, J. Abrantes, B. Colaco, **M. Castagnola**, F. Amado, P.J. Esteves, R. Vitorino
 “Characterization of thymosin beta4 in mammal’s saliva
Peptides, 40: 1-7 (2013) (I.F. 2.522)
67. P. Chiusolo, S. Giammarco, C. Fanali, S. Bellesi, E. Metafuni, S. Sica, F. Iavarone, T. Cabras, I. Messina, G. Leone, **M. Castagnola**
 “Salivary proteomic analysis and acute graft-versus-host disease after allogeneic hematopoietic stem cell transplantation”
Biol. Blood Marrow Transplant., 19: 888-892 (2013) (I.F. 3.940)
68. J. Knop, C. App., A.H.C. Horn, F. Iavarone, **M. Castagnola**, E. Hannappel
 “High-resolution HPLC-ESI-MS characterization of the contact sites of the actin-thymosin β_4 complex by chemical and enzymatic cross-linking”
Biochemistry-US, 52: 5553-5562 (2013) (I.F. 3.377)
69. G. Pichiri, P. Coni, S. Nemolato, T. Cabras, M.U. Fanari, A. Sanna, E. Di Felice, I. Messina, **M. Castagnola**, G. Faa
 “Cellular trafficking of thymosin beta-4 in HEPG2 cells following serum starvation”
Plos One, 8: issue 8-e67999 (I.F. 3.730)
70. B. Manconi, T. Cabras, E. Pisano, M.T. Sanna, A. Olianias, V. Fanos, G. Faa, S. Nemolato, F. Iavarone, **M. Castagnola**, I. Messina
 “Modifications of the acidic soluble salivary proteome in human children from birth to the age of 48months investigated by a top-down HPLC-ESI-MS platform.”
J. Proteomics, 91: 536-543 (I.F. 4.088)
71. G. Vento, A. Lio, C. Tirone, C. Aurilia, M. Tana, A. Piras, C. Ricci, S. Perelli, C. Romagnoli, B. Posteraro, F. Iavarone, T. Cabras, C. Fanali, I. Messina, **M. Castagnola**
 “Association of high levels of α -defensins and S100A proteins with Candida mannan detection in bronchoalveolar lavage fluid of preterm neonates”
Pediatr. Res. 74: 19-25. (I.F. 2.673)
72. T. Cabras, E. Pisano, C. Montaldo, M.R. Giuca, F. Iavarone, G. Zampino, **M. Castagnola**, I. Messina.
 “Significant modifications of the salivary proteome potentially associated with complications of Down syndrome revealed by top-down proteomics”
Mol Cell Proteomics, 12: 1844-1852. (I.F. 7.251)

Modulo “Meccanismi di regolazione metabolica negli eritrociti di organismi polari”

(TA.P02.036.001)

Responsabile: Prof. Bruno GIARDINA