

Prof. Anna Maria Papini, PhD

ORCID: 0000-0002-2947-7107

**Publications in peer-reviewed scientific journals and Patents
(Period 1983-2024)**

1983-1990

[1] M. Taddei, **A.M. Papini**, M. Fiorenza, A. Ricci, G. Seconi. Ring opening reactions of thiiranes with group IVB organometallics: a new regioselective route to β -amino and β -cyanide thiols. *TETRAHEDRON LETT* 1983; 24(22), 2311-2314. DOI: 10.1016/S0040-4039(00)81911-5

[2] **A.M. Papini**, A. Ricci, M. Taddei, G. Seconi and P. Dembech. Regiospecific Conversion of Oxiranes, Oxetanes, and Lactones into Difunctional Nitrogen Compounds via Aminosilanes and Aminostannanes. *J CHEM SOC PERKIN TRANS I* 1984; 2261-2265. ISSN: 14727781

[3] S. Francalanci, S. Giorgini, M. Gola, M. Ginanneschi, **A.M. Papini** and A. Sertoli. Eczema da contatto da antifungino topico. *Boll. Dermatol. Allergol. e professionale* (1986) 1, 9-13.

[4] M. Ginanneschi, A. Sertoli, **A.M. Papini**, G. Rapi. Chemical aspects of hapten-carrier interaction in contact allergy. *GIORN IT DERM VENER* 1987; 122(7-8), 389-395. PubMed ID 3666799. ISSN: 00264741

[5] S. Giuliani, R. Amann, **A.M. Papini**, C.A. Maggi, A. Meli. Modulatory action of galanin on responses due to antidromic activation of peripheral terminals of capsaicin-sensitive sensory nerves. *EUR J PHARMACOL* 1989; 163(1), 91-96. DOI: 10.1016/0014-2999(89)90399-3

[6] M. Ginanneschi, M. Chelli, **A.M. Papini**, G. Rapi. Highly efficient synthesis of steroid-17-spiro-5'-oxazolidine-2',4'-diones from 17-keto steroids. *STEROIDS* 1990; 55(11), 501-506. DOI:10.1016/0039-128X(90)90088-S

[7] M. Chelli, G. Dupuis, S. Evangelista, M. Ginanneschi, A. Meli, **A.M. Papini**, G. Rapi. Suppression of the skin response to alantolactone in alantolactone-sensitized guinea pigs treated with N-acetyl-L-cysteinyl-L-alanine methyl ester. *EUR J MED CHEM* 1990; 25(2), 107-115. DOI: 10.1016/0223-5234(90)90017-W

1991-1998

[8] R. von Grünigen, G. Siglmüller, **A.M. Papini**, K. Köcher, B. Traving, W. Göhring, L. Moroder. Enzyme Immunoassay with Captured Hapten. A sensitive Gastrin Assay with Biotinyl-Gastrin Derivatives. *BIOL CHEM HOPPE-SEYLER* 1991; 372(3), 163-172. DOI: 10.1515/bchm3.1991.372.1.163

Published by DE GRUYTER, BERLIN, GERMANY, MARCH 1991.

[9] **A.M. Papini**, S. Rudolph, G. Siglmüller, H.-J. Musiol, W. Göhring, L. Moroder. Alkylation of histidine with maleimido-compounds. *INT J PEPT PROT RES* 1992; 39(4), 348-355. DOI: 10.1111/j.1399-3011.1992.tb01594.x

[10] D. Donati, M. Ginanneschi, M. Chelli, G. Rapi, **A.M. Papini**. X-ray structure analysis of 3,11,17-trioxoandrostane-5 α -carbonitrile and of 17 α -ethoxycarbonyloxy-3-oxoandrost-4-ene-17-

carbonitrile. STEROIDS 1992; 57(10), 502-506. DOI: 10.1016/0039-128X(92)90045-B
Published by ELSEVIER, STONEHAM, MA, USA, OCTOBER 1992.

- [11] L. Moroder, A.M. Papini, G. Siglmüller, K. Köcher, E. Dörrer, C.H. Schneider. Induction and Detection of anti-peptide antibody specificity is critically affected by the mode of hapten presentation. BIOL CHEM HOPPE-SEYLER 1992; 373(6), 315-321. DOI: 10.1515/bchm3.1992.373.315
- [12] M. Chelli, M. Ginanneschi, A.M. Papini, D. Pinzani, G. Rapi. Cyclization of C-Terminal Histidine Peptides to 7-Amino-dihydroimidazo[1,5-*c*]pyrimidin-5-one Derivatives. J CHEM RESEARCH - S 1993; 3:118-119.
- [13] M. Chelli, M. Ginanneschi, A.M. Papini, D. Pinzani, G. Rapi, E. Borghi, F. Laschi, M. Occhiuzzi. Complexation properties of Histidyl-Glycyl-containing peptides. Part 1. Synthesis of cyclo(L-His-Gly)₄. J CHEM RESEARCH - S 1993; 11:437-437 and J CHEM RES - M 1993; 11:2929-2938.
- [14] E. Borghi, F. Laschi, M. Occhiuzzi, M. Chelli, M. Ginanneschi, A.M. Papini; G. Rapi. Complexation properties of Histidyl-Glycyl containing peptides. Part 2. An X-band EPR study of divalent paramagnetic metal ions interacting in solution with H-(L-His-Gly)₂-OMe. J CHEM RESEARCH - S 1994; 1:48-49.
- [15] D. Pinzani, A.M. Papini, M. Chelli, M. Ginanneschi, C.A. Maggi, R. Patacchini, L. Quartara; G. Rapi. Synthesis and biological activity of tachykinin analogs containing the adamantane moiety. LETT PEPT SCI 1996; 2(5), 307-313. DOI: 10.1007/BF00142244
- [16] M. Ginanneschi, M. Chelli, A.M. Papini, D. Pinzani; G. Rapi. Structure of the adduct of Alantolactone with Z-L-Cys-L-Ala-OMe and ¹H and ¹³C assignment of the Alantolactone moiety by 14 Tesla NMR. MAGN RESON CHEM 1996; 34(2), 95-99. DOI: 10.1002/(SICI)1097-458X(199602)34
- [17] D. Pinzani, A.M. Papini, M.E. Vallecchi, M. Chelli, M. Ginanneschi, G. Rapi, L. Quartara, R. Patacchini, C.A. Maggi, F.M. Arcamone. Glycosyl derivatives of NK₂ tachykinin receptor antagonists. BIOORG MED CHEM LETT 1996; 6(4), 367-372. DOI: 10.1016/0960-894X(96)00039-X
- [18] G. Giorgi, M. Ginanneschi, M. Chelli, A.M. Papini, F. Laschi, E. Borghi. Histidyl-Glycyl containing peptides. Characterization and complexation properties of H(L-His-Gly)₂-R with hydrogen and alkali metal ions in the gas-phase. RAPID COMMUN MASS SPECTROM 1996; 10(10), 1266-1272. DOI: 10.1002/(SICI)1097-0231(19960731)10
Published by WILEY, CHICHESTER, W. SUSSEX, ENGLAND, OCTOBER 1996.
- [19] G. Caminati, A.M. Papini, S. Mazzucco, G. Gabrielli. Lipopeptides of myelin basic protein in mono- and multilayers. THIN SOLID FILMS 1998; 327:37-41. DOI: 10.1016/S0040-6090(98)00583-5
- [20] M. Ciuffi, C. Cellai, S. Franchi-Micheli, P. Failli, L. Zilletti, M. Ginanneschi, M. Chelli, A.M. Papini; F. Paoletti. An *in vivo*, *ex vivo* and *in vitro* comparative study of activity of copper oligopeptide complexes vs Cu(II) ions. PHARMACOL RES 1998; 38(4), 279-287. DOI: 10.1006/phrs.1998.0369

1999

- [21] S. Mazzucco, E. Nardi, M. Chelli, M. Ginanneschi, G. Rapi, **A.M. Papini**, M. Vergelli, B. Mazzanti, L. Massacesi, L. Amaducci. Synthesis of lipopeptides of the immunodominant epitope hMBP(83-99) containing amide or C-C bond linked hydrophobic chains for the study of T cell response. *LETT PEPT SCI* 1999; 6(1), 51-59. DOI: 10.1007/BF02443618
- [22] G. Sabatino, M. Chelli, S. Mazzucco, M. Ginanneschi, **A.M. Papini**. Cyclisation of Histidine Containing Peptides in the Solid-Phase by Anchoring the Imidazole Ring to Trityl Resins. *TETRAHEDRON LETT* 1999; 40(4), 809-812. DOI: 10.1016/S0040-4039(98)02459-9
- [23] S. Mazzucco, S. Matà, M. Vergelli, R. Fioresi, E. Nardi, B. Mazzanti, M. Chelli, F. Lolli, M. Ginanneschi, F. Pinto, L. Massacesi, **A.M. Papini**. A synthetic glycopeptide of human Myelin Oligodendrocyte Glycoprotein to detect antibody responses in Multiple Sclerosis and other neurological diseases. *BIOORG MED CHEM LETT* 1999; 9(2), 167-172. DOI: 10.1016/S0960-894X(98)00698-2
- [24] M. Casolaro, M. Chelli, M. Ginanneschi, F. Laschi, M. Muniz-Miranda, **A.M. Papini**, G. Sbrana. Spectroscopic and potentiometric study of copper(II) complexes with L-histidyl-glycyl-L-histidyl-glycine in aqueous solution. *SPECTROCHIMICA ACTA PART A, MOL & BIOMOL SPECTROSCOPY* 1999; 55(7-8), 1675-1689. DOI: 10.1016/S1386-1425(98)00328-X
- [25] C. Galoppini, S. Meini, M. Tancredi, A. Di Fenza, A. Triolo, L. Quartara, C.A. Maggi, F. Formaggio, C. Toniolo, S. Mazzucco, **A.M. Papini**, P. Rovero. A new class of pseudopeptide antagonists of the kinin B1 receptor containing alkyl spacers. *J MED CHEM* 1999; 42(3), 409-414. DOI: 10.1021/jm980495r

2001

- [26] C. Giragossian, E. Nardi, C. Savery, M. Pellegrini, S. Meini, C.A. Maggi, **A.M. Papini**, D. Mierke. Structural characterization of lipopeptide agonists for the Bradykinin B2 receptor. *BIOPOLYMERS* 2001; 58(5), 511-520. DOI: 10.1002/1097-0282(20010415)58
- [27] **A.M. Papini**, B. Mazzanti, E. Nardi, E. Traggiai, C. Ballerini, T. Biagioli, H. Kalbacher, H. Beck, M. Deeg, M. Chelli, M. Ginanneschi, L. Massacesi, M. Vergelli. Palmitoyl Derivatives of GpMBP Epitopes: T-Cell Response and Peptidases Susceptibility. *J MED CHEM* 2001; 44(21), 3504-3510. DOI: 10.1021/jm010913j
- [28] F. Meyer, J. Uziel, **A.M. Papini**, S. Jugé. Triphenylphosphonium salts bearing an L-alanyl substituents: short synthesis and enantiomeric analysis by NMR. *TETRAHEDRON LETT* 2001; 42(24), 3981-3984. DOI: 10.1016/S0040-4039(01)00650-5
- [29] A. Carotenuto, A.M. D'Ursi, E. Nardi, **A.M. Papini**, P. Rovero. Conformational analysis of a glycosylated Human Oligodendrocyte Glycoprotein peptide epitope able to detect antibody response in Multiple Sclerosis. *J MED CHEM* 2001; 44(14), 2378-2381. DOI: 10.1021/jm010811t

2002

- [30] E. Peroni, G. Caminati, P. Baglioni, F. Nuti, M. Chelli, **A.M. Papini**. A New lipophilic fluorescent probe for interaction studies of bioactive lipopeptides with membrane models. *BIOORG MED CHEM LETT* 2002; 12(13), 1731-1734. DOI: 10.1016/S0960-894X(02)00253-6

[31] M. Casolaro, M. Chelli, M. Ginanneschi, F. Laschi, L. Messori, M. Muniz-Miranda, **A.M. Papini**, T. Kowalik-Jankowska, H. Kozlowski. Spectroscopic and potentiometric study of the SOD mimic system Copper/Acetyl-L-histidyl-glycyl-L-histidyl-glycine. J INORGANIC BIOCHEM 2002; 89(3-4), 181-190. DOI: 10.1016/S0162-0134(02)00365-3

[32] **A.M. Papini**, E. Nardi, F. Nuti, J. Uziel, M. Ginanneschi, M. Chelli, A. Brandi. Diastereoselective alkylation of Schiff bases for the synthesis of lipidic unnatural Fmoc-protected α -amino acids. EUR J ORG CHEM 2002; 16, 2736-2741. DOI: 10.1002/1099-0690(200208)2002:16<2736

[33] C. Giragossian, S. Stone, **A.M. Papini**, L. Moroder, D.F. Mierke. Conformational and molecular modeling studies of sulfated cholecystokinin-15. BIOCHEM BIOPHYS RES COMMUN 2002; 293(3), 1053-1059. DOI: 10.1016/S0006-291X(02)00334-0

[34] G. Sabatino, B. Mulinacci, M.C. Alcaro, M. Chelli, P. Rovero, **A.M. Papini**. Assessment of new 6Cl-HOBt based coupling reagents for peptide synthesis. Part 1: Coupling efficiency study. LETT PEPT SCI 2002; 9(2-3), 119-123. DOI: 10.1007/BF02576873

2003

[35] G. Sabatino, M. Chinol, G. Paganelli, S. Papi, M. Chelli, G. Leone, **A.M. Papini**, A. De Luca, M. Ginanneschi. A New Biotin Derivative-DOTA Conjugate as a candidate for pre-targeted diagnosis and therapy of tumors. J MED CHEM 2003; 46(14):3170-3173. DOI: 10.1021/jm030789z

[36] M.C. Alcaro, M. Orfei, M. Chelli, M. Ginanneschi, **A.M. Papini**. Solid-phase approach to the synthesis of cyclen derivatives from cyclotetrapeptides. TETRAHEDRON LETTERS 2003; 44(28):5217-5219. DOI: 10.1016/S0040-4039(03)01213-9

[37] F. Meyer, A. Laaziri, **A.M. Papini**, J. Uziel, S. Jugé. Efficient synthesis of β -halogeno protected L-alanines and their β -phosphonium derivatives. TETRAHEDRON ASYMMETRY 2003; 14(15):2229-2238. DOI: 10.1016/S0957-4166(03)00484-1

[38] M.C. Alcaro, E. Peroni, P. Rovero, **A.M. Papini**. Synthetic peptides in the diagnosis of HIV infection. REVIEW. CURRENT PROTEIN AND PEPTIDE SCIENCE 2003; 4(4):285-290. DOI: 10.2174/1389203033487117

[39] F. Lolli, B. Mazzanti, P. Rovero, **A.M. Papini**. Synthetic peptides in the diagnosis of neurological diseases. REVIEW. CURRENT PROTEIN AND PEPTIDE SCIENCE 2003; 4(4):277-284. DOI: 10.2174/1389203033487162

2004

[40] M.C. Alcaro, G. Sabatino, J. Uziel, M. Chelli, M. Ginanneschi, P. Rovero, **A.M. Papini**. On-resin head-to-tail cyclization of cyclotetrapeptides: optimization of crucial parameters. J PEPT SCI 2004; 10(4), 218-228. DOI: 10.1002/psc.512.

[41] F. Meyer, A. Laaziri, **A.M. Papini**, J. Uziel, S. Jugé. A novel phosphorus-carbon bond formation by ring opening with diethyl phosphite of oxazolines derived from serine. TETRAHEDRON 2004; 60(16), 3593-3597. DOI: 10.1016/j.tet.2004.03.001

[42] F. Machetti, F.M. Cordero, F. De Sarlo, **A.M. Papini**, M.C. Alcaro, A. Brandi. Synthesis of free and N^α-Fmoc/N^α-Boc protected (2S, 4S)- and (2S, 4R)-4-aminopipecolic acids. EUR J ORG CHEM 2004; 13, 2928-2935. DOI: 10.1002/ejoc.200400045

[43] A. Innocenti, A. Casini, M.C. Alcaro, **A.M. Papini**, A. Scozzafava, C.T. Supuran. Carbonic anhydrase inhibitors: The first on-resin screening of a 4-sulfamoylphenylthioureas library. J MED CHEM 2004; 47(21), 5224-5229. DOI: 10.1021/jm049692i.

[44] G. Caminati, E. Peroni, **A.M. Papini**, P. Baglioni. Photophysical investigation of lipopeptides of myelin basic protein in phospholipid vesicles. PROGRESS IN COLLOID & POLYMER SCIENCE 2004; 126, 163-168. DOI: 10.1007/b93987

[45] G. Sabatino, M. Chelli, A. Brandi, **A.M. Papini**. Analytical methods for solid phase peptide synthesis. CURRENT ORGANIC CHEMISTRY 2004; 8(4), 291-301. DOI: 10.2174/1385272043485954

2005

[46] A. Carotenuto, D. D'Addona, E. Rivalta, M. Chelli, **A.M. Papini**, P. Rovero, M. Ginanneschi. Synthesis of a dicarba-analogue of octreotide keeping the type II' β-turn of the pharmacophore in water solution. LETT ORG CHEM 2005; 2(3), 274-279. DOI: 10.2174/1570178053765276

[47] J. Matsoukas, V. Apostolopoulos, H. Kalbacher, **A.M. Papini**, T. Tselios, K. Chatzantoni, T. Biagioli, F. Lolli, S. Deraos, P. Papathanassopoulos, A. Troganis, E. Mantzourani, T. Mavromoustakos, A. Mouzaki. Design and synthesis of a novel potent myelin basic protein epitope 87-99 cyclic analogue: enhanced stability and biological properties of mimics render them a potentially new class of immunomodulators. J MED CHEM 2005; 48(5), 1470-1480. DOI: 10.1021/jm040849g

[48] F. Nuti, S. Hildenbrand, M. Chelli, R. Wodarzb, **A.M. Papini**. Synthesis of DEHP metabolites as biomarkers for GC-MS evaluation of phthalates as endocrine disrupters. BIOORG MED CHEM 2005; 13(10), 3461-3465. DOI: 10.1016/j.bmc.2005.03.005

[49] **A.M. Papini**. Simple test for Multiple Sclerosis. NATURE MEDICINE 2005; 11(1), 13. DOI: 10.1038/nm0105-13

[50] Lolli F, Mulinacci B, Carotenuto A, Bonetti B, Sabatino G, Mazzanti B, D'Ursi AM, Novellino E, Pazzagli M, Lovato L, Alcaro MC, Peroni E, Pozo-Carrero MC, Nuti F, Battistini L, Borsellino G, Chelli M, Rovero P, **Papini AM**. An N-glucosylated peptide detecting disease-specific autoantibodies, biomarkers of multiple sclerosis. PROC NATL ACAD SCI USA 2005; 102(29):10273-10278. DOI: 10.1073/pnas.0503178102

[51] F. Lolli, B. Mazzanti, M. Pazzagli, E. Peroni, M.C. Alcaro, R. Lanzillo, V. Brescia Morra, L. Santoro, C. Gasperini, S. Galgani, M.M. D' Ellos, V. Zipoli, S. Sotgiu, M. Pugliatti, P. Rovero, M. Chelli, **A.M. Papini**. The glycopeptide CSF114(Glc) detects serum antibodies in Multiple Sclerosis. J NEUROIMMUNOL 2005; 167(1-2), 131-137. DOI: 10.1016/j.jneuroim.2005.05.016

[52] S. Giannecchini, M.C. Alcaro, P. Isola, O. Sichi, M. Pistello, **A.M. Papini**, P. Rovero, M. Bendinelli. Feline immunodeficiency virus plasma load reduction by a retroinverso octapeptide reproducing the Trp-rich motif of the transmembrane glycoprotein. ANTIVIRAL THERAPY 2005; 10(5), 671-680.

[53] F. Lolli, P. Rovero, M. Chelli, **A.M. Papini**. Antibodies against glycosylated native MOG are elevated in patients with Multiple Sclerosis. NEUROLOGY 2005 65(5), 781-782.

[54] Kamiński ZJ, Kolesińska B, Kolesińska J, Sabatino G, Chelli M, Rovero P, Błaszczyk M, Główka ML, **Papini AM**. N-triazinylammonium tetrafluoroborates. A new generation of efficient coupling reagents useful for peptide synthesis. J AM CHEM SOC 2005; 127(48):16912-16920. DOI: 10.1021/ja054260y

2006

[55] F. Minutolo, S. Bertini, L. Betti, R. Danesi, G. Gervasi, G. Giannaccini, A. Martinelli, **A.M. Papini**, E. Peroni, G. Placanica, S. Rapposelli, T. Tuccinardi, M. Macchia. Synthesis of stable analogues of geranylgeranyl Diphosphate possessing a (Z,E,E)-geranylgeranyl side chain, docking analysis, and biological assays for prenyl protein transferase inhibition. CHEMMEDCHEM 2006; 1(2), 218-224. DOI: 10.1002/cmdc.200500010

[56] A.M. D'Ursi, S. Giannecchini, C. Esposito, M.C. Alcaro, O. Sichi, M.R. Armenante, A. Carotenuto, **A.M. Papini**, M. Bendinelli, P. Rovero. Development of antiviral fusion inhibitors: short modified peptides derived from the transmembrane glycoprotein of feline immunodeficiency virus. CHEMBIOCHEM 2006; 7(5), 774-779. DOI: 10.1002/cbic.200500390

[57] Alcaro MC, Vinci V, D'Ursi AM, Scrima M, Chelli M, Giuliani S, Meini S, Di Giacomo M, Colombo L, **Papini AM**. Bradykinin antagonists modified with dipeptide mimetic beta-turn inducers. BIOORG MED CHEM LETT 2006; 16(9):2387-2390. DOI: 10.1016/j.bmcl.2006.01.125

[58] M.C. Alcaro, **A.M. Papini**. Contribution of peptides to Multiple Sclerosis research. BIOPOLYMERS 2006; 84(4), 349-367. DOI: 10.1002/bip.20498

[59] V.V. Volkov, F. Nuti, Y. Takaoka, R. Chelli, **A.M. Papini**, R. Righini. Hydration and hydrogen bonding of carbonyls in dimyristoyl-phospahtidylcholine bilayer. J AM CHEM SOC 2006; 128(29), 9466-9471. DOI: 10.1021/ja0614621

[60] A. Carotenuto, A.M. D'Ursi, B. Mulinacci, I. Paolini, F. Lolli, **A.M. Papini**, E. Novellino, P. Rovero. Conformation-activity relationship of designed glycopeptides as synthetic probes for the detection of autoantibodies, biomarkers of multiple sclerosis. J MED CHEM 2006; 49(17), 5072-5079. DOI: 10.1021/jm060117j

[61] F. Lolli, P. Rovero, M. Chelli, **A.M. Papini**. Toward biomarkers in multiple sclerosis: new advances. EXPERT REVIEW NEUROTHERAPEUTICS 2006; 6(5), 781-794. DOI: 10.1586/14737175.6.5.781

2007

[62] Rizzolo F, Sabatino G, Chelli M, Rovero P, **Papini AM**. A convenient microwave-enhanced solid-phase synthesis of difficult peptide sequences: case study of Gramicidin A and CSF114(Glc). INT J PEPT RES THER 2007; 13(1-2), 203-208. DOI:10.1007/s10989-006-9066-8

[63] K. Jastrząbek, B. Kolesińska, G. Sabatino, F. Rizzolo, **A.M. Papini**, Z.J. Kamiński. Benzyloxy derivatives of triazine-based coupling reagents designed for an efficient solid phase peptide synthesis on polystyrene resin. INT J PEPT RES THER 2007; 13(1-2), 229-236. DOI: 10.1007/s10989-006-9071-y

[64] B. Kolesińska, J. Frączyk, G. Sabatino, **A.M. Papini**, Z.J. Kamiński. Sulfonates of N-triazinylammonium salts as highly efficient, inexpensive and environmentally friendly coupling reagents for peptide synthesis. CHIMICA OGGI-CHEMISTRY TODAY 2007; 25(1), 10-13.

[65] I. Paolini, F. Nuti, M.C. Pozo-Carrero, F. Barbetti, B. Kolesinska, Z.J. Kaminski, M. Chelli, **A.M. Papini**. A convenient microwave-assisted synthesis of N-glycosyl amino acids. TETRAHEDRON LETTERS 2007; 48(16), 2901-2904. DOI: 10.1016/j.tetlett.2007.02.087

[66] F. Nuti, I. Paolini, F. Cardona, M. Chelli, F. Lolli, A. Brandi, A. Goti, P. Rovero, **A.M. Papini**. Fmoc-protected iminosugar modified asparagine derivatives as building blocks for glycomimetics-containing peptides. BIOORG MED CHEM 2007; 15(12), 3965-3973.

[67] M.C. Alcaro, F. Lolli, P. Migliorini, M. Chelli, P. Rovero, **A.M. Papini**. Peptides as autoimmune diseases antigenic probes: a peptide-based reverse approach to detect biomarkers of autoimmune diseases. CHIMICA OGGI-CHEMISTRY TODAY 2007; 25(3S), 14-16.

[68] V.V. Volkov, R. Chelli, W. Zhuang, F. Nuti, Y. Takaoka, **A.M. Papini**, S. Mukamel, R. Righini. Electrostatic interactions in phospholipid membranes revealed by coherent two-dimensional infrared spectroscopy. PROC NATL ACAD SCI USA 2007; 104(39):15323-15327. DOI: 10.1073/pnas.0706426104

2008

[69] D'Addona D, Carotenuto A, Novellino E, Piccand V, Reubi JC, Di Cianni A, Gori F, **Papini AM**, Ginanneschi M. Novel sst₅-selective somatostatin dicarba-analogues: synthesis and conformation-affinity relationships. J MED CHEM 2008; 51(3):512-520. DOI: 10.1021/jm070886i

[70] F. Real Fernández, A. Chamois-Colson, J. Bayardon, F. Nuti, E. Peroni, R. Meunier-Prest, F. Lolli, M. Chelli, C. Darcel, S. Jugè, **A.M. Papini**. Ferrocenyl Glycopeptides as Electrochemical Probes to Detect Autoantibodies in Multiple Sclerosis Patients' Sera. BIOPOLYMERS 2008; 90(4):488-495. DOI: 10.1002/bip.20955

[71] Cantel S, Isaad Ale C, Scrima M, Levy JJ, DiMarchi RD, Rovero P, Halperin JA, D'Ursi AM, **Papini AM**, Chorev M. Synthesis and conformational analysis of a cyclic peptide obtained via i to i+4 intramolecular side-chain to side-chain azide-alkyne 1,3-dipolar cycloaddition. J ORG CHEM 2008; 73(15), 5663-5674. DOI: 10.1021/jo800142s. **FEATURED ARTICLE AND COVER**.

[72] I. Paolini, F. Rizzolo, **A.M. Papini**. Optimized strategies for the synthesis of biomolecules by the microwave approach. CHIMICA OGGI-CHEMISTRY TODAY 2008; 26(4S), 35-38.

[73] A. Carotenuto, M.C. Alcaro, M.R. Saviello, E. Peroni, F. Nuti, **A.M. Papini**, E. Novellino, P. Rovero. Designed glycopeptides with different β-turn types as synthetic probes for the detection of autoantibodies, biomarkers of Multiple Sclerosis. J MED CHEM 2008; 51(17), 5304-5309. DOI: 10.1021/jm800391y

[74] Le Chevalier Isaad A, Barbetti F, Rovero P, D'Ursi AM, Chelli M, Choref M, **Papini AM**. N(alpha)-Fmoc-Protected omega-Azido and omega-Ynoic-alpha-Amino Acids as Building Blocks for the Synthesis of "Clickable" Peptides. EUR J ORG CHEM 2008; 31:5308-5314. DOI: 10.1002/ejoc.200800717

[75] G. Sabatino, **A.M. Papini**. Advances in automatic, manual and microwave-assisted solid-phase peptide synthesis. REVIEW. CURRENT OPINION IN DRUG DISCOVERY & DEVELOPMENT 2008; 11(6), 762-768.

2009

[76] S. Carganico, P. Rovero, J. A. Halperin, **A.M. Papini**, M. Choref Building Blocks for the Synthesis of Post-Translationally Modified Glycated Peptides and Proteins. J PEPT SCI 2009; 15(2), 67-71. DOI: 10.1002/psc.1105

[77] M.C. Alcaro, I. Paolini, F. Lolli, P. Migliorini, P. Rovero, **A.M. Papini**. Peptide contribution to the diagnosis of autoimmune diseases. CHIMICA OGGI-CHEMISTRY TODAY 2009; 27(2), 11-14.

[78] M. Angeles Bonache, F. Nuti, A. Le Chevalier Isaad, F. Real-Fernandez, M. Chelli, P. Rovero, **A.M. Papini**. Synthesis of new ribosylated Asn building blocks as useful tools for glycopeptide and glycoprotein synthesis. TETRAHEDRON LETT 2009; 50(28), 4151-4153. DOI: 10.1016/j.tetlet.2009.04.124

[79] A. Le Chevalier-Isaad, **A.M. Papini**, M. Choref, P. Rovero. Side chain-to-side chain cyclization by click reaction. J PEPT SCI 2009; 15(7), 451-454. DOI: 10.1002/psc.1141

[80] **A.M. Papini**. The use of post-translationally modified peptides for detection of biomarkers of immune-mediated diseases. **REVIEW ZERVAS AWARD LECTURE**. J PEPT SCI 2009, 15(10), 621-628. DOI: 10.1002/psc.1166

2010

[81] Scrima M, Le Chevalier-Isaad A, Rovero P, **Papini AM**, Choref M, D'Ursi AM. CuI-Catalyzed Azide–Alkyne Intramolecular i-to-(i+4) Side-Chain-to-Side-Chain Cyclization Promotes the Formation of Helix-Like Secondary Structures. EUR J ORG CHEM 2010; 3:446-457. DOI: 10.1002/ejoc.200901157

[82] F. Real-Fernández, F. Nuti, M.A. Bonache, M. Boccalini, S. Chimichi, M. Chelli, **A.M. Papini**. Microwave-assisted reaction of glycosylamine with aspartic acid. AMINO ACIDS 2010; 39(2), 599-604. DOI: 10.1007/s00726-010-0484-8

[83] M. Frediani, D. Sémeril, D. Matt, F. Rizzolo, **A.M. Papini**, P. Frediani, L. Rosi. Ring Opening Polymerization of rac-Lactide using a calix[4]arene-based Titanium (IV) Complex. Published by INTERNATIONAL JOURNAL OF POLYMER SCIENCE 2010, 490724, 1-6.

[84] M. Frediani, D. Sémeril, D. Matt, F. Rizzolo, **A.M. Papini**, P. Frediani, L. Rosi, M. Santella, G. Giachi. L-Lactide Polymerization by Calix[4]arene-Titanium (IV) Complex Using Conventional Heating and Microwave Irradiation. E-POLYMERS 2010; 19, 1-8.

[85] F. Nuti, E. Peroni, F. Real-Fernández, M.A. Bonache, A. Le Chevalier-Isaad, M. Chelli, N. Lubin-Germain, J. Uziel, P. Rovero, F. Lolli, **A.M. Papini**. Post-translationally modified peptides efficiently mimicking neo-antigens: a challenge for theragnostics of autoimmune diseases. BIOPOLYMERS 2010; 94(6), 791-799. DOI: 10.1002/bip.21456

[86] Di Cianni A, Carotenuto A, Brancaccio D, Novellino E, Reubi JC, Beetschen K, **Papini AM**, Ginanneschi M. Novel octreotide dicaeba-analogues with high affinity and different selectivity for somatostatin receptors. J MED CHEM 2010; 53(16):6188-6197. DOI: 10.1021/jm1005868

2011

[87] F. Gori, B. Mulinacci, L. Massai, C. Avolio, M. Caragnano, E. Peroni, S. Lori, M. Chelli, **A.M. Papini**, P. Rovero, F. Lolli. IgG and IgM antibodies to the refolded MOG(1-125) extracellular domain in humans. J NEUROIMMUNOL 2011; 233(1-2), 216-220. DOI: 10.1016/j.jneuroim.2010.11.011

[88] F. Rizzolo, C. Testa, D. Lambardi, M. Chorev, M. Chelli, P. Rovero, **A.M. Papini**. Conventional and microwave-assisted SPPS approach: a comparative synthesis of PTHrP(1-34)NH₂. J PEPT SCI 2011; 17(10), 708-714. DOI: 10.1002/psc.1395

[89] C. Selmi, **A.M. Papini**, P. Pugliese, M.C. Alcaro, M.E. Gershwin. Environmental pathways to autoimmune diseases: the cases of primary biliary cirrhosis and multiple sclerosis, ARCHIVES OF MEDICAL SCIENCE 2011; 7(3), 368-380. DOI: 10.5114/aoms.2011.23398

2012

[90] C. Testa, F. Nuti, J. Hayek, C. De Felice, M. Chelli, P. Rovero, G. Latini, **A.M. Papini**. Di-(2-Ethylhexyl) Phthalate and Autism Spectrum Disorders. ASN NEURO (AMERICAN SOCIETY FOR NEUROCHEMISTRY) 2012; 4(4), 223-229. DOI:10.1042/AN20120015

[91] F. Real-Fernández, I. Passalacqua, E. Peroni, M. Chelli, F. Lolli, **A.M. Papini**, P. Rovero. Glycopeptide-based antibody detection in Multiple Sclerosis by surface plasmon resonance. SENSORS 2012; 12(5):5596-5607. DOI: 10.3390/s120505596

Published by MDPI AG, POSTFACH, CH-4005 BASEL, SWITZERLAND, MAY 2012

[92] Scrima M, Grimaldi M, Di Marino S, Testa C, Rovero P, **Papini AM**, Chorev M, D'Ursi AM. Solvent independent conformational propensities of [1,2,3]triazolyl-bridged parathyroid hormone-related peptide-derived cyclo-nonapeptide analogues. BIOPOLYMERS 2012; 98(6):535-545. DOI: 10.1002/bip.22139

[93] Guardiani C, Signorini GF, Livi R, **Papini AM**, Procacci P. Conformational landscape of N-glycosylated peptides detecting autoantibodies in multiple sclerosis, revealed by Hamiltonian replica exchange. J PHYS CHEM B 2012; 116(18):5458-5467. DOI: 10.1021/jp301442n

[94] Pandey S, Alcaro MC, Scrima M, Peroni E, Paolini I, Di Marino S, Barbetti F, Carotenuto A, Novellino E, **Papini AM**, D'Ursi AM, Rovero P. Designed glycopeptides mimetics of myelin protein epitopes as synthetic probes for the detection of autoantibodies, biomarkers of multiple sclerosis. J MED CHEM 2012; 55(23):10437-10447. DOI: 10.1021/jm301031r

2013

[95] Pandey S, Dioni I, Lambardi D, Real-Fernandez F, Peroni E, Pacini G, Lolli F, Seraglia R, **Papini AM**, Rovero P. Alpha actinin is specifically recognized by multiple sclerosis autoantibodies isolated using an N-glucosylated peptide epitope. *MOL CELL PROTEOMICS* 2013; 12(2), 277-282. DOI: 10.1074/mcp.M112.017087

[96] Potenza M, Sabatino G, Giambi F, Rosi L, **Papini AM**, Dei L. Analysis of egg-based model wall paintings by use of an innovative combined dot-ELISA and UPLC-based approach. *ANALYTICAL & BIOANALYTICAL CHEMISTRY* 2013; 405(2-3), 691-701. DOI: 10.1007/s00216-012-6049-9

[97] Chanson J-B, Paolini I, Collongues N, Alcaro MC, Blanc F., Barbetti F., Fleury M., Peroni E, Rovero P, Rudolf G, Lolli F, Trifilieff E, **Papini AM**, de Seze J. Evaluation of new immunological targets in neuromyelitis optica. *J PEPT SCI* 2013; 19(1):25-32. DOI: 10.1002/psc.2470

[98] Friligou I, Rizzolo F, Nuti F, Tselios T, Evangelidou M, Emmanouil M, Karamita M, Matsoukas J, Chelli M, Rovero P, **Papini AM**. Divergent and convergent synthesis of polymannosylated dibranched antigenic peptide of the immunodominant epitope MBP(83-99). *BIOORG MED CHEM* 2013; 21(21):6718-6725. DOI: 10.1016/j.bmc.2013.08.008

[99] Candelaresi M, Ragnoni E, Cappelli C, Corozzi A, Lima M, Monti S, Mennucci B, Nuti F, **Papini AM**, Foggi P. Conformational analysis of Gly-Ala-NHMe in D(2)O and DMSO solutions: a two-dimensional infrared spectroscopy study. *J PHYS CHEM B* 2013; 117(46):14226-14237. DOI: 10.1021/jp406139t

2014

[100] Naegeli A, Neupert C, Fan YY, Lin CW, Poljak K, **Papini AM**, Schwarz F, Aeby M. Molecular analysis of an alternative N-glycosylation machinery by functional transfer from *Actinobacillus pleuropneumoniae* to *Escherichia coli*. *J BIOL CHEM* 2014; 289(4):2170-2179. DOI: 10.1074/jbc.M113.524462

[101] Pratesi A, Gabbiani C, Michelucci E, Ginanneschi M, **Papini AM**, Rubbiani R, Ott I, Messori L. Insights on the mechanism of thioredoxin reductase inhibition by Gold N-heterocyclic carbene compounds using the synthetic linear Selenocysteine containing C-terminal peptide hTrxR(488-499): An ESI-MS investigation. *J INORG BIOCHEM* 2014; 136, 161-169. DOI: 10.1016/j.jinorgbio.2014.01.009

[102] C. Gellini, G. Sabatino, **A.M. Papini**, M. Muniz-Miranda. SERS study of a tetrapeptide based on histidine and glycine residues, adsorbed on copper/silver colloidal nanoparticles. *J RAMAN SPECTROSC* 2014; 45(6), 418-423. DOI: 10.1002/jrs.4484

[103] M. Di Pisa, P. Buccato, G. Sabatino, F. Real Fernández, B. Berti, F. Coccola, **A.M. Papini**, P. Rovero. Epitope Mapping of the N-terminal Portion of Tissue Transglutaminase Protein Antigen to Identify Linear Epitopes in Celiac Disease. *J PEPT SCI* 2014; 20(9), 689-695. DOI: 10.1002/psc.2650

[104] **Papini AM**, Nuti F, Real-Fernandez F, Rossi G, Tiberi C, Sabatino G, Pandey S, Leoncini S, Signorini C, Pecorelli A, Guerranti R, Lavielle S, Ciccoli L, Rovero P, De Felice C, Hayek J. Immune dysfunction in Rett syndrome patients revealed by high levels of serum anti-N(Glc) IgM antibody fraction. *J IMMUNOL RES* 2014:260973. DOI: 10.1155/2014/260973

[105] Auburger N, Di Pisa M, Larregola M, Chassaing G, Peroni E, Lavielle S, **Papini AM**, Lequin O, Mallet JM. Glaser oxidative coupling on peptides: stabilization of β -turn structure via a 1,3-

butadiyne constraint. BIOORG MED CHEM 2014; 22(24):6924-6932. DOI: 10.1016/j.bmc.2014.10.026

[106] Testa C, Scrima M, Grimaldi M, D'Ursi AM, Dirain ML, Lubin-Germain N, Singh A, Haskell-Luevano C, Chorev M, Rovero P, **Papini AM**. 1,4-disubstituted-[1,2,3]triazolyl-containing analogues of MT-II: design, synthesis, conformational analysis, and biological activity. J MED CHEM 2014; 57(22):9424-9434. DOI: 10.1021/jm501027w

2015

[107] Kolesinska B, Rozniakowski KK, Fraczyk J, Relich I, **Papini AM**, Kaminski ZJ. The Effect of Counter-ion and Tertiary Amine on the Efficiency of N-Triazinylammonium Sulfonates in Solution and Solid-Phase Peptide Synthesis. Eur J.O.C. 2015; 2:401-408. DOI: 10.1002/ejoc.201402862

[108] Di Pisa M, Pascarella S, Scrima M, Sabatino G, Real-Fernández F, Chelli M, Renzi D, Calabró A, D'Ursi AM, **Papini AM**, Rovero P. Synthetic peptides reproducing tissue transglutaminase-gliadin complex neo-epitopes as probes for antibody detection in celiac disease patients' sera. J MED CHEM 2015; 58(3):1390-1399. DOI: 10.1021/jm5017126

[109] Smerieri A, Testa C, Lazzeroni P, Nuti F, Grossi E, Cesari S, Montanini L, Latini G, Bernasconi S, **Papini AM**, Street ME. Di-(2-ethylhexyl) phthalate metabolites in urine show age-related changes and associations with adiposity and parameters of insulin sensitivity in childhood. PLOS ONE 2015; 10(2):e0117831. DOI: 10.1371/journal.pone.0117831

[110] Pratesi A, Ginanneschi M, Melani F, Chinol M, Carollo A, Paganelli G, Lumini M, Bartoli M, Frediani M, Rosi L, Petrucci G, Messori L, **Papini AM**. Design and solid phase synthesis of new DOTA conjugated (+)-biotin dimers planned to develop molecular weight-tuned avidin oligomers. ORG BIOMOL CHEM 2015; 13(13):3988-4001. DOI: 10.1039/c4ob02685c

[111] Rentier C, Monasson O, Nuti F, Rovero P, Sabatino G, **Papini AM**. Methionine sulfoxide- and sulfone-containing peptide synthesis: management of a relevant post-translational modifications in proteins. CHIMICA OGGI-CHEMISTRY TODAY 2015; 33(2S):32-35.

[112] Rentier C, Pacini G, Nuti F, Peroni E, Rovero P, **Papini AM**. Synthesis of diastereomerically pure Lys(N \sum -lipoyl) building blocks and their use in Fmoc/tBu solid phase synthesis of lipoyl-containing peptides for diagnosis of primary biliary cirrhosis. J PEPT SCI 2015; 21(5):408-414. DOI: 10.1002/psc.2761

[113] Real-Fernández F, Rossi G, Lolli F, **Papini AM**, Rovero P. Label-free method for anti-glucopeptide antibody detection in Multiple Sclerosis. METHODSX 2015; 2:141-144. DOI: 10.1016/j.mex.2015.03.004

[114] Real Fernández F, Di Pisa M, Rossi G, Auburger N, Lequin O, Larregola M, Benchohra A, Mansuy C, Chassaing G, Lolli F, Hayek J, Lavielle S, Rovero P, Mallet JM, **Papini AM**. Antibody recognition in multiple sclerosis and Rett syndrome using a collection of linear and cyclic N-glucosylated antigenic probes. BIOPOLYMERS 2015; 104(5):560-576. DOI: 10.1002/bip.22677

[115] **Papini AM**, König E. Novel diagnostic tools and solutions for multiple sclerosis treatment: a patent review (2009-2014). REVIEW. EXPERT OPIN THER PAT 2015; 25(8):873-84. DOI: 10.1517/13543776.2015.1043267

[116] Bellagha-Chenchah W, Sella C, Real Fernandez F, Peroni E, Lolli F, Amatore C, Thouin L, **Papini AM**. Interactions between Human Antibodies and Synthetic Conformational Peptide Epitopes: Innovative Approach for Electrochemical Detection of Biomarkers of Multiple Sclerosis at Platinum Electrodes. ELECTROCHIMICA ACTA 2015; 176, 1239-1247. DOI: 10.1016/j.electacta.2015.07.158

[117] Pacini G, Carotenuto A, Rentier C, Nuti F, Real-Fernandez F, Brancaccio D, Sabatino G, Larregola M, Peroni E, Migliorini P, Novellino E, Battezzati PM, Selmi C, **Papini AM**, Rovero P. Role of Lipoylation of the Immunodominant Epitope of Pyruvate Dehydrogenase Complex: Toward a Peptide-Based Diagnostic Assay for Primary Biliary Cirrhosis. J MED CHEM 2015; 58(16):6619-6629. DOI: 10.1021/acs.jmedchem.5b00783

[118] Real-Fernández F, Cimaz R, Rossi G, Simonini G, Giani T, Pagnini I, **Papini AM**, Rovero P. Surface plasmon resonance-based methodology for anti-adalimumab antibody identification and kinetic characterization. ANAL BIOANAL CHEM 2015; 407(24):7477-7485. DOI: 10.1007/s00216-015-8915-8

[119] Becucci L, Benci S, Nuti F, Real-Fernandez F, Vaezi Z, Stella L, Venanzi M, Rovero P, **Papini AM**. Interaction Study of Phospholipid Membranes with an N-Glucosylated β -Turn Peptide Structure Detecting Autoantibodies Biomarkers of Multiple Sclerosis. MEMBRANES 2015; 5(4):576-596. DOI: 10.3390/membranes5040576

2016

[120] Walvoort MT, Testa C, Eilam R, Aharoni R, Nuti F, Rossi G, Real-Fernandez F, Lanzillo R, Brescia Morra V, Lolli F, Rovero P, Imperiali B, **Papini AM**. Antibodies from multiple sclerosis patients preferentially recognize hyperglucosylated adhesin of non-typeable Haemophilus influenzae. SCI REP 2016; 6:39430. DOI: 10.1038/srep39430

[121] Sabatino G, Guryanov I, Rombecchi A, Zanon J, Ricci A, Cabri W, **Papini AM**, Rovero P. Production of peptides as generic drugs: a patent landscape of octreotide. REVIEW. EXPERT OPIN THER PAT 2016; 26(4):485-495. DOI: 10.1517/13543776.2016.1158810

[122] De Felice C, Leoncini S, Signorini C, Cortelazzo A, Rovero P, Durand T, Ciccoli L, **Papini AM**, Hayek J. Rett syndrome: An autoimmune disease? REVIEW. AUTOIMMUNITY REVIEWS 2016; 15(4):411-416. DOI: 10.1016/j.autrev.2016.01.011

[123] Giangrande C, Auberger N, Rentier C, **Papini AM**, Mallet JM, Lavielle S, Vinh J. Multi-Stage Mass Spectrometry Analysis of Sugar-Conjugated β -Turn Structures to be Used as Probes in Autoimmune Diseases. J AM SOC MASS SPECTROM 2016; 27(4):735-747. DOI: 10.1007/s13361-015-1321-9

[124] Pacini G, Ieronymaki M, Nuti F, Sabatino G, Larregola M, Aharoni R, **Papini AM**, Rovero P. Epitope mapping of anti-myelin oligodendrocyte glycoprotein (MOG) antibodies in a mouse model of multiple sclerosis: microwave-assisted synthesis of the peptide antigens and ELISA screening. J PEPT SCI 2016; 22(1):52-58. doi: 10.1002/psc.2839

Published by WILEY, 111 RIVER ST, HOBOKEN 07030-5774, NJ USA, JANUARY 2016

[125] Pasarella S, Tiberi C, Sabatino G, Nuti F, **Papini AM**, Giovannelli L, Rovero P. Serpin A1 C-Terminal Peptides as Collagen Turnover Modulators. CHEMMEDCHEM 2016; 11(16):1850-1855. doi: 10.1002/cmdc.201500472

[126] E. Peroni, F. Real Fernández, C. Gheri, F. Nuti, A.-C. Mitaine-Offer, F. Lolli, M.-A. Lacaille-Dubois, **A.M. Papini**. Natural Triterpene Glycosides for Antibody Recognition. PLANTA MED LETT 2016; 3(01): e2-e7. DOI: 10.1055/s-0035-1568263

2017

[127] Champy AS, Mitaine-Offer AC, Miyamoto T, Tanaka C, **Papini AM**, Lacaille-Dubois MA. Structural analysis of oleanane-type saponins from the roots of Wisteria frutescens. Magnetic Resonance in Chemistry 2017; 55(6), 595-600. DOI: 10.1002/mrc.4550

[128] Pratesi A, Ginanneschi M, Lumini M, **Papini AM**, Novellino E, Brancaccio D, Carotenuto A. DOTA-Derivatives of Octreotide Dicarba-Analogs with High Affinity for Somatostatin sst_{2,5} Receptors. FRONT CHEM 2017; 5:8. DOI: 10.3389/fchem.2017.00008

[129] Pratesi A, Stazzoni S, Lumini M, Sabatino G, Carotenuto A, Brancaccio D, Novellino E, Chinol M, Rovero P, Ginanneschi M, **Papini AM**. Synthesis of dicarba-cyclooctapeptide Somatostatin analogs by conventional and MW-assisted RCM: a study about the impact of the configuration at C α of selected amino acids. Chemical Engineering and Processing: Process Intensification 2017; 122, 365-372. DOI: 10.1016/j.cep.2017.02.005

[130] Ieronymaki M, Nuti F, Brancaccio D, Rossi G, Real-Fernández F, Cao Y, Monasson O, Larregola M, Peroni E, Uziel J, Sabatino G, Novellino E, Carotenuto A, **Papini AM**, Rovero P. Structure-Activity Relationship Studies, SPR Affinity Characterization, and Conformational Analysis of Peptides That Mimic the HNK-1 Carbohydrate Epitope. CHEMMEDCHEM 2017; 12(10):751-759. DOI: 10.1002/cmdc.201700042

[131] Uber, D; Wyrzykowski, D; Tiberi, C; Sabatino, G; Zmudzinska, W; Chmurzynski, L; Papini, AM; Makowska, J. Conformation-dependent affinity of Cu(II) ions peptide complexes derived from the human Pin1 protein ITC and DSC study. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 2017; 127:2, 1431-1443. DOI: 10.1007/s10973-016-5387-9

[132] Champy AS, Mitaine-Offer AC, Paululat T, **Papini AM**, Lacaille-Dubois MA. Triterpene Saponins from Wisteria floribunda "macrobotrys" and "rosea". Natural Product Communications 2017; 12:10, 1573-1576. <https://doi.org/10.1177/1934578x1701201036>

2018

[133] Grage SL, Kara S, Bordessa A, Doan V, Rizzolo F, Putzu M, Kubař T, **Papini AM**, Chaume G, Brigaud T, Afonin S, Ulrich AS. Orthogonal ¹⁸F-labeling for solid-state NMR reveals the conformation and orientation of short peptaibols in membranes. Chemistry - A European Journal 2018; 24(17), 4328-4335. DOI: 10.1002/chem.201704307

[134] C. Testa, D. D'Addona, M. Scrima, A.M. Tedeschi, A.M. D'Ursi, C. Bernhard, F. Denat, C. Bello, P. Rovero, M. Chorev, **A.M. Papini**. Design, Synthesis and Conformational Studies of [DOTA]-Octreotide Analogues Containing [1,2,3]Triazolyl as a Disulfide Mimetic. PEPTIDE SCIENCE 2018; 110(5) e24071. DOI: 10.1002/pep2.24071

[135] Kukacka Z, Iurascu M, Lupu L, Rusche H, Murphy M, Altamore L, Borri F, Maeser S, **Papini AM**, Hennermann J, Przybylski M. Antibody Epitope of human α -Galactosidase A revealed by

affinity-mass spectrometry: a basis for reversing immunoreactivity in enzyme replacement therapy of Fabry Disease. CHEMMEDCHEM 2018; 13(9); 909-915. DOI:10.1002/cmdc.201800094

[136] Becucci L, Aloisi G, **Papini AM**, Guidelli R. Channel-forming activity of nisin in two mercury-supported biomimetic membranes. JOURNAL OF ELECTROANALYTICAL CHEMISTRY 2018; 812; 186-193. DOI:10.1016/j.jelechem.2017.11.061.

[137] Champy-Tixier AS, Mitaine-Offer AC, Real-Fernández F, Miyamoto T, Tanaka C, **Papini AM**, Lacaille-Dubois MA. Oleanane-type glycosides from the roots of Weigela florida "rumba" and evaluation of their antibody recognition. FITOTERAPIA 2018; 128:198-203. DOI: 10.1016/j.fitote.2018.04.017

[138] C. Testa, **A.M. Papini**, M. Chrev, P Rovero. Copper-catalyzed azide alkyne cycloaddition (CuAAC)-mediated macrocyclization of peptides: impact on conformation and biological activity. Current Topics in Medicinal Chemistry 2018; 18(7), 591-610. DOI: 10.2174/1568026618666180518095755

[139] M.E. Street, S. Angelini, S. Bernasconi, E. Burgio, A. Cassio, C. Catellani, F. Cirillo, A. Deodati, E. Fabbrizi, V. Fanos, G. Gargano, E. Grossi, L. Iughetti, P. Lazzeroni, A. Mantovani, L. Migliore, P. Palanza, G. Panzica , **A.M. Papini**, S. Parmigiani, B. Predieri, C. Sartori, G. Tridenti, S. Amarri. Current Knowledge on Endocrine Disrupting Chemicals (EDCs) from Animal Biology to Humans, from Pregnancy to Adulthood: Highlights from a National Italian Meeting. REVIEW. INT J MOL SCI 2018; 19(6):1647. DOI:10.3390/ijms19061647

[140] Nuti F, Gallo A, Real-Fernandez F, Crulli M, Rentier C, Piarulli F, Peroni E, Rossi G, Traldi P, Rovero P, Lapolla A, **Papini AM**. Antibodies to post-translationally modified mitochondrial peptide PDC-E2(167-184) in type 1 diabetes. ARCH BIOCHEM BIOPHYS 2018; 659:66-74. DOI: 10.1016/j.abb.2018.09.021

[141] **A.M. Papini**. From morphine to endogenous opioid peptides, e.g., endorphins: the endless quest for the perfect painkiller. SUBSTANTIA 2018; 2(2): 81-91. DOI: 10.13128/substantia-63 Published by UNIVERSITY PRESS, FIRENZE, ITALY, SEPTEMBER 24, 2018.

2019

[142] Real-Fernández F, Pregnolato F, Cimaz R, **Papini AM**, Borghi MO, Meroni PL, Rovero P. Detection of anti-adalimumab antibodies in a RA responsive cohort of patients using three different techniques. ANALYTICAL BIOCHEMISTRY 2019; 566, 133-138. DOI: 10.1016/j.ab.2018.11.018

[143] A. Mazzoleni, J.-M. Mallet, P. Rovero, **A.M. Papini**. Glycoreplica peptides to investigate molecular mechanisms of immune-mediated physiological versus pathological conditions. Archives of Biochemistry and Biophysics 2019; 663, 44-53. DOI: 10.1016/j.abb.2018.12.030

[144] I. Guryanov, F. Real-Fernández, G. Sabatino, N. Prisco, E. Popova, V. Korzhikov-Vlakh, B. Biondi, **A.M. Papini**, E. Korzhikova-Vlakh, P. Rovero, T. Tennikova. Modeling interaction between gp120 HIV protein and CCR5 receptor. Journal of Peptide Science 2019; 25(2):e3142. DOI: 10.1002/psc.3142

[145] C. Bello, P. Rovero, **A.M. Papini**. Just a spoonful of sugar: short glycans affects protein properties and functions. J PEPT SCI 2019; 25(5), e31-67. DOI: 10.1002/psc.3167

[146] V. Iaconisi, G. Secci, G. Sabatino, G. Piccolo, L. Gasco, **A.M. Papini**, G. Parisi. Effect of mealworm (*Tenebrio molitor* L.) larvae meal on amino acid composition of gilthead sea bream (*Sparus aurata* L.) and rainbow trout (*Oncorhynchus mykiss* W.) fillets. *Aquaculture* 2019; 513, 734403. Doi: 10.1016/j.aquaculture.2019.734403

[147] F. Nuti, C. Gellini, M. Larregola, L. Squillantini, R. Chelli, P.R. Salvi, O. Lequin, G. Pietraperzia, **A.M. Papini**. A photochromic azobenzene peptidomimetic of a β -turn model peptide structure as a conformational switch. *FRONTIERS IN CHEMISTRY. SECTION: SUPRAMOLECULAR CHEMISTRY* 2019; 7, Art. 180. DOI: 10.3389/fchem.2019.00180

[148] De Santis, M; Isailovic, N.; Generali, E.; Ceribelli, A.; Altamore, L.; Real-Fernandez, F.; **Papini, A.M.**; Rovero, P.; Sabatino, G.; Selmi, C. Humoral response against LL-37 in psoriatic disease: comment on the article by Yuan et al. *Arthritis and Rheumatology* 2019; 71(11), 1964-1965. DOI: 10.1002/art.41010

[149] Nuti F, Gallo A, Real-Fernandez F, Rentier C, Rossi G, Piarulli F, Traldi P, Carganico S, Rovero P, Lapolla A, **Papini AM**. Study of Aberrant Modifications in Peptides as a Test Bench to Investigate the Immunological Response to Non-Enzymatic Glycation. *Folia Biol (Praha)*. 2019;65(4):195-202.

[150] Nguyen DH, Mitaine-Offer AC, Maroso S, **Papini AM**, Paululat T, Bellaye PS, Collin B, Chambin O, Lacaille-Dubois MA. Cytotoxic glycosides from the roots of *Weigela* x "Bristol Ruby". *Fitoterapia* 2019, 137:104242. doi: 10.1016/j.fitote.2019.104242. Epub 2019 Jun 13.

[151] Real-Fernández F; Pacini G; Nuti F; Conciarelli G; De Felice C; Hayek J; Rovero P; **Papini AM**. Is aberrant N-glucosylation relevant to recognise anti-MOG antibodies in Rett syndrome? *Substantia* 2019, 3(2), 19-25. <https://doi.org/10.13128/Substantia-632>

2020

[152] M. Kijewska, F. Nuti, M. Wierzbicka, M. Waliczek, P. Ledwon, A. Staskiewicz, F. Real-Fernandez, G. Sabatino, P. Rovero, P. Stefanowicz, Z. Szewczuk, **A.M. Papini**. An Optimised Di-Boronate-ChemMatrix Affinity Chromatography to Trap Deoxyfructosylated Peptides as Biomarkers of Glycation. *Molecules* 2020, 25, 755. doi:10.3390/molecules25030755

[153] A. D'Ercole, G. Sabatino, L. Pacini, E. Impresari, I. Capecchi, **A.M. Papini**, P. Rovero. On-resin microwave-assisted copper-catalysed azide-alkyne cycloaddition of H1-relaxin B single chain "stapled" analogues. *Peptide Science* 2020, 112, e24159, 1-10. DOI: 10.1002/pep2.24159.

[154] B. Petit, A.-C. Mitaine-Offer, F. Real-Fernández, **A.M. Papini**, C. Delaude, T. Miyamoto C. Tanaka, P. Rovero, M.-A. Lacaille-Dubois. Triterpene glycosides from *Blighia welwitschii* and evaluation of their antibody recognition capacity in multiple sclerosis. *Phytochemistry* 2020, 176, 112392. doi.org/10.1016/j.phytochem.2020.112392

[155] A. Mazzoleni, F. Real-Fernandez, M. Larregola, F. Nuti, O. Lequin, **A.M. Papini**, J.-M. Mallet, P. Rovero. Hyperglucosylated adhesin derived peptides as antigenic probes in multiple sclerosis: structure optimisation and immunological evaluation. *J. Pept. Sci.* 2020; 26(1), e3281; 1-11. doi.org/10.1002/psc.3281

[156] Nuti, F.; Fernandez, F.R.; Sabatino, G.; Peroni, E.; Mulinacci, B.; Paolini, I.; Pisa, M.D.; Tiberi, C.; Lolli, F.; Petruzzo, M.; Lanzillo, R.; Morra, V.B.; Rovero, P.; **Papini, A.M.** A Multiple N-

Glucosylated Peptide Epitope Efficiently Detecting Antibodies in Multiple Sclerosis. *Brain Sci.* 2020, 10(7), 453, 1-15. [doi:10.3390/brainsci10070453](https://doi.org/10.3390/brainsci10070453). This article belongs to the Special Issue Advances in Multiple Sclerosis Research—Series I

[157] F. Errante, P. Ledwoń, R. Latajka, P. Rovero, **A.M. Papini**. Cosmeceutical peptides in the framework of sustainable wellness economy. *Front. Chem.* 2020, 8:572923. Women in Science: Chemistry. doi:10.3389/fchem.2020.572923.

[158] S. Pandey, Z. Tuma, E. Peroni, O. Monasson, **A.M. Papini**, M. Chottova Dvorakova. Identification of NPB, NPW and their receptor in the rat heart. *International Journal of Molecular Sciences* 2020, 21(21), 7827. doi:10.3390/ijms21217827

[159] A. Marcinia, W. Witak, G. Sabatino, **A.M. Papini**, J. Brasuń. Detailed insight into interaction of bicyclic somatostatin analogue with Cu(II) ions. *Int. J. Mol. Sci.* 2020, 21, 8794, 1-13. doi:10.3390/ijms21228794

2021

[160] P. Ledwoń, F. Errante, **A.M. Papini**, P. Rovero, R. Latajka. Peptides as Active Ingredients: a Challenge for Cosmeceutical Industry. *Chemistry & Biodiversity* 2021, 18(2), e2000833. doi: 10.1002/cbdv.202000833

[161] F. Errante; M. Menicatti; M. Pallecchi; L. Giovannelli; **A.M. Papini**; P. Rovero, G. Bartolucci. Susceptibility of cosmeceutical peptides to proteases activity: development of dermal stability test by LC-MS/MS analysis. *Journal of Pharmaceutical and Biomedical Analysis* 2021, 194, 113775. doi: 10.1016/j.jpba.2020.113775.

[162] F. Real-Fernández, A. Gallo, F. Nuti, L. Altamore, G. Giovanna Del Vescovo, P. Traldi, E. Ragazzi, P. Rovero, A. Lapolla, **A.M. Papini**. Cross-reactive peptide epitopes of Enterovirus Coxsackie B4 and human glutamic acid decarboxylase detecting antibodies in Latent Autoimmune Diabetes in Adults versus Type 1 Diabetes. *Clinica Chimica Acta* 2021, 515, 73-79. doi.org/10.1016/j.cca.2021.01.002.

[163] Sabatino, G.; D'Ercole, A.; Pacini, L.; Zini, M.; Ribecai, A.; Paio, A.; Rovero, P.; **Papini, A.M.** An optimized scalable fully automated solid-phase microwave-assisted cGMP-ready process for the preparation of Eptifibatide. *Org. Process Res. Dev.* 2021, 25, 3, 552–563. <http://dx.doi.org/10.1021/acs.oprd.0c00490>. Special issue Women in process chemistry.

[164] Staśkiewicz A., Ledwoń P., Rovero P., **Papini A.M.**, Latajka R. Triazole-modified peptidomimetics: an opportunity for drug discovery and development. *Frontiers in Chemistry* 2021, 9, 674705, 1-16. doi: 10.3389/fchem.2021.674705. Review article.

[165] Ledwoń P., **Papini A.M.**, Rovero P., Latajka R. Peptides and Peptidomimetics as Inhibitors of Enzymes Involved in Fibrillar Collagen Degradation. *Materials* 2021, 14(12), 3217, 1-28. <https://doi.org/10.3390/ma14123217>

[167] H. Rusche, E. Marrani, F. Real-Fernandez, R. Ponti, F. Terzani, I. Maccora, O. Monasson, M.V. Mastrolia, E. Peroni, I. Pagnini, R. Cimaz, **A.M. Papini**, G. Simonini, P. Rovero A peptide-based anti-Adalimumab antibody assay to monitor immune response to biologics treatment in juvenile idiopathic arthritis and childhood chronic non-infectious uveitis. *Scientific Reports* 2021, 11, 16393, 1-13. DOI: 10.1038/s41598-021-95920-9

[168] A. D'Ercole, L. Pacini, G. Sabatino, M. Zini, F. Nuti, A. Ribecai, A. Paio, P. Rovero, **A.M. Papini**. An Optimized Safe Process from Bench to Pilot cGMP Production of API Eptifibatide Using a Multigram-Scale Microwave-Assisted Solid-Phase Peptide Synthesizer. *Org. Process Res. Dev.* 2021, 25, 12, 2754–2771. <https://doi.org/10.1021/acs.oprd.1c00368>

[169] F. Real-Fernández, A. Gallo, F. Nuti, L. Altamore, G. Giovanna Del Vescovo, P. Traldi, E. Ragazzi, P. Rovero, A. Lapolla, **A.M. Papini**. ELISA based on peptide antigens reproducing cross-reactive viral epitopes to detect antibodies in latent autoimmune diabetes in adults vs. type 1 diabetes. *MethodsX* 2021, 8, 101452, 1-6. DOI: 10.1016/j.mex.2021.101452

[170] K. Żamojća, D. Wyrzykowski, G. Sabatino, **A.M. Papini**, R. Wieczorek, L. Chmurzyński, J. Makowska. Key role of histidine residues orientation in affinity binding of model pentapeptides with Ni²⁺ ions: A theoretical supported experimental study. *Journal of Molecular Liquids* 2021, 341, 117414, 1-8. DOI: 10.1016/j.molliq.2021.117414

2022

[171] Mazzoleni A., Real-Fernandez F., Nuti F., Lanzillo R., Brescia Morra V., Dambruoso P., Bertoldo M., Rovero P., Mallet J.-M., **Papini A.M.** Selective Capture of Anti-N-glucosylated NTHi Adhesin Peptide Antibodies by a Multivalent Dextran Conjugate. (2022) *ChemBioChem*, 23 (3), art. no. e202100515, DOI: 10.1002/cbic.202100515

[172] C. Testa, **A.M. Papini**, R. Zeidler, D. Vullo, F. Carta, C. T. Supuran, P. Rovero. First studies on tumor associated carbonic anhydrases IX and XII monoclonal antibodies conjugated to small molecule inhibitors. *Journal of Enzyme Inhibition and Medicinal Chemistry* 2022, 37:1, 592-596. DOI: 10.1080/14756366.2021.2004593

[173] A. Traoré, M.A. Guindo, D. Konaté, B. Traoré, S.A. Diakité, S. Kanté, A. Dembélé, A. Cissé, M. Kodio, Y.I. Coulibaly, O. Faye, A.V. Kajava, F. Pratesi, P. Migliorini, **A.M. Papini**, L. Pacini, P. Rovero, F. Errante, M. Diakite, M. Arevalo-Herrera, S. Herrera, G. Corradin, S. Balam. Seroreactivity of SARS-CoV-2 recombinant Spike S protein, RBD and its binding interface peptide BIP in COVID-19 patients and their cross-reactivity in non-COVID-19 samples from malaria-endemic areas. *Frontiers in Immunology* (Section: Vaccines and Molecular Therapeutics) 2022, 13:856033, 1-15. DOI: 10.3389/fimmu.2022.856033.

[174] F. Pratesi, F. Errante, L. Pacini, I.C. Peña-Moreno, S. Quiceno, A. Carotenuto, S. Balam, D. Konaté, M. Diakite, M. Arevalo-Herrera, A. V Kajava, P. Rovero, G. Corradin, P. Migliorini, **A.M. Papini**, S. Herrera Valencia. A SARS-CoV-2 Spike Receptor Binding Motif peptide induces anti-spike antibodies in mice and is recognized by COVID-19 patients. *Frontiers in Immunology* (Section Vaccines and Molecular Therapeutics) 2022, 13:879946, 1-11. DOI: 10.3389/fimmu.2022.879946.

[175] A. Staśkiewicz, M. Quagliata, F. Real-Fernandez, F. Nuti, R. Lanzillo, V. Brescia-Morra, H. Rusche, M. Jewginski, A. Carotenuto, D. Brancaccio, R. Aharoni, R. Arnon, P. Rovero, R. Latajka, **A.M. Papini**. Role of helical structure in MBP immunodominant peptides for efficient IgM antibody recognition in Multiple Sclerosis. *Frontiers in Chemistry* (Section Chemical Biology) 2022, 10:885180, 1-11. doi: 10.3389/fchem.2022.885180

[176] N.R.M. Reintjens, L. Yakovlieva, N. Marinus, J. Hekelaar, F. Nuti, **A.M. Papini**, M.D. Witte, A.J. Minnaard, M.T.C. Walvoort. Palladium-catalyzed oxidation of glucose in glycopeptides. *Eur. J. Org. Chem.* 2022, 25, e202200677, 1-7. doi: 10.1002/ejoc.202200677.

[177] A. D'Ercole, S. Nistri, L. Pacini, A. Carotenuto, F. Santoro, **A.M. Papini**, R.A.D. Bathgate, D. Bani, P. Rovero. Synthetic short-chain peptide analogues of H1 relaxin lack affinity for the RXFP1 receptor and relaxin-like bioactivity. Clues to a better understanding of relaxin agonist design. *Frontiers in Pharmacology* 2022, 13:942178, 1-7. DOI: 10.3389/fphar.2022.942178.

[178] A. Marciniaka, L. Pacini, **A.M. Papini**, J. Brasuña. Bicyclopeptides: a new class of ligands for Cu(II) ions. *Dalton Transactions*, 2022, 51(35), pp. 13368–13375. DOI:10.1039/D2DT01497A.

[179] Brzeski J., Wyrzykowski D., Chylewska A., Makowski M., **Papini A.M.**, Makowska J. Metal-Ion Interactions with Dodecapeptide Fragments of Human Cationic Antimicrobial Protein LL-37 [hCAP(134-170)]. (2022) *Journal of Physical Chemistry B*, 126 (36), pp. 6911–6921. DOI: 10.1021/acs.jpcb.2c05200

[180] R. Gallorini, B. Ciuffi, F. Real-Fernández, C. Carrozzini, E. Ravera, **A.M. Papini**, L. Rosi: Subcritical hydrothermal liquefaction as a pretreatment for enzymatic degradation of polyurethane. *ACS Omega* 2022, 7 (42), 37757-37763. DOI: 10.1021/acsomega.2c04734

2023

[181] Pacini, L.; D'Ercole, A.; **Papini, A.M.**; Bani, D.; Nistri, S.; Rovero, P. Porcine Relaxin but Not Serelaxin Shows Residual Bioactivity after In Vitro Simulated Intestinal Digestion-Clues for the Development of New Relaxin Peptide Agonists Suitable for Oral Delivery. *International Journal of Molecular Sciences* 2023, 24(1), 48, 1-9. DOI: 10.3390/ijms24010048

[182] Bello, C.; Pranzini, E.; Piemontese, E.; Schrems, M.; Taddei, M.L.; Giovannelli, L.; Schubert, M.; Becker, C.F.W.; Rovero, P.; **Papini, A.M.** Chemoenzymatic Synthesis of Glycopeptides to Explore the Role of Mucin 1 Glycosylation in Cell Adhesion. *ChemBioChem* 2023, 24, e202200741, 1-7. DOI:10.1002/cbic.202200741

[183] Strauss, P.; Nuti, F.; Quagliata, M.; **Papini, A.M.**; Hurevich, M. Accelerated solid-phase synthesis of glycopeptides containing multiple N-glycosylated sites. *Organic & Biomolecular Chemistry* 2023, 21(8), 1674-1679. Doi: 10.1039/D2OB01886A

[184] Quagliata, M.; **Papini, A.M.**; Rovero, P. Malaria Vaccines. *Expert Opinion on Therapeutic Patents* 2023, 33(3), 169-178. DOI: 10.1080/13543776.2023.2190884

[185] M. Quagliata, F. Nuti, F. Real-Fernandez, K. Kirilova Kirilova, F. Santoro, A. Carotenuto, **A.M. Papini**, P. Rovero. Glucopeptides derived from myelin-relevant proteins and hyperglucosylated nontypeable *Haemophilus influenzae* bacterial adhesin cross-react with multiple sclerosis specific antibodies: A step forward in the identification of native autoantigens in multiple sclerosis. *Journal of Peptide Science* 2023, 29, e3475, 1-8. DOI: 10.1002/psc.3475

[186] P. Ledwoń, W. Goldeman, K. Hałdys, M. Jewgiński, G. Calamai, J. Rossowska, **A.M. Papini**, P. Rovero, R. Latajkaa. Tripeptides conjugated with thiosemicarbazones: new inhibitors of tyrosinase for cosmeceutical use. *Journal of Enzyme Inhibition and Medicinal Chemistry* 2023, 38(1), 2193676, 1-12. DOI: 10.1080/14756366.2023.2193676.

[187] Quagliata, M.; Stincarelli, M.A.; **Papini, A.M.**; Giannecchini, S.; Rovero, P. Antiviral Activity against SARS-CoV-2 of Conformationally Constrained Helical Peptides Derived from Angiotensin-Converting Enzyme-2. *ACS Omega* 2023, 8, 22665-22672. DOI: 10.1021/acsomega.3c01436

[188] M.A. Stincarelli, M. Quagliata, A. Di Santo, L. Pacini, F. Real Fernandez, R. Arvia, S. Rinaldi, **A.M. Papini**, P. Rovero, S. Giannecchini. SARS-CoV-2 inhibitory activity of a short peptide derived from internal fusion peptide of S2 subunit of spike glycoprotein. *Virus Research* 2023, 334, 199170, 1-11. DOI: 10.1016/j.virusres.2023.199170

[189] Stincarelli M.A., Quagliata M., Di Santo A., Pacini L., Fernandez F.R., Arvia R., Rinaldi S., **Papini A.M.**, Rovero P., Giannecchini S. SARS-CoV-2 inhibitory activity of a short peptide derived from internal fusion peptide of S2 subunit of spike glycoprotein. (2023) *Virus Research*, 334, art. no. 199170. DOI: 10.1016/j.virusres.2023.199170

[190] Nuti, F.; Larregola, M.; Staśkiewicz, A.; Retzl, B.; Tomasevic, N.; Macchia, L.; Street, M.; Jewginski, M.; Lequin, O.; Latajka, R.; Rovero, P.; Gruber, C.; Chorev, M.; **Papini, A.M.** Design, synthesis, conformational analysis, and biological activity of C α ¹-to-C α ⁶ 1,4- and 4,1-disubstituted 1H-[1,2,3]triazol-1-yl-bridged oxytocin analogues *Journal of Enzyme Inhibition and Medicinal Chemistry*. (2023), 38(1), 2254019. DOI:10.1080/14756366.2023.2254019

[191] Quagliata M., **Papini A.M.**, Rovero P. Therapeutic applications of thymosin peptides: a patent landscape 2018-present. (2023) *Expert Opinion on Therapeutic Patents*, 33 (12), pp. 865 – 873. DOI: 10.1080/13543776.2023.2298833

[192] Fahim I.S., André V., Mohanty J., Cigala R.M., Ghosh S., Martins L.M.D.R.S., Han W., **Papini A.M.**, Costa J., Manzoli M., Giuffrè O., Rani R., Rehman S., Crans D.C., Oksdath-Mansilla G., Sabuzi F. Editorial: Women in chemistry 2022. (2023) *Frontiers in Chemistry*, 11, art. no. 1230005. DOI: 10.3389/fchem.2023.1230005

[193] Gallorini R., Aquilia S., Bello C., Ciardelli F., Pinna M., **Papini A.M.**, Rosi L. Pyrolysis of spent rapeseed meal: A circular economy example for waste valorization. (2023) *Journal of Analytical and Applied Pyrolysis*, 174, 106138. DOI: 10.1016/j.jaat.2023.106138

2024

[194] Pacini L., Muthyalu M., Aguiar L., Zitterbart R., Rovero P., **Papini A.M.** Optimization of peptide synthesis time and sustainability using novel eco-friendly binary solvent systems with induction heating on an automated peptide synthesizer. (2024) *Journal of Peptide Science*. DOI: 10.1002/psc.3605

[195] Quagliata M., **Papini A.M.**, Rovero P. Chemically modified antiviral peptides against SARS-CoV-2. (2024) *Journal of Peptide Science*, 30 (2), art. no. e3541. DOI: 10.1002/psc.3541

[196] Casoria M., Macchiagodena M., Rovero P., Andreini C., **Papini A.M.**, Cardini G., Pagliai M. Upgrading of the general AMBER force field 2 for fluorinated alcohol biosolvents: A validation for water solutions and melittin solvation. (2024) *Journal of Peptide Science*, 30 (2), art. no. e3543. DOI: 10.1002/psc.3543

[197] Wyrzykowski D., Wieczorek R., Kloska A., Errante F., **Papini A.M.**, Makowska J. Influence of the modification of the cosmetic peptide Argireline on the affinity toward copper(II) ions. (2024) *Journal of Peptide Science*, 30 (3), art. no. e3547. DOI: 10.1002/psc.3547

[198] Errante F., Pallecchi M., Bartolucci G., Frediani E., Margheri F., Giovannelli L., **Papini A.M.**, Rovero P.. Retro-Inverso Collagen Modulator Peptide Derived from Serpin A1 with Enhanced

Stability and Activity In Vitro (2024) Journal of Medicinal Chemistry, 67 (6), pp. 5053 – 5063. DOI: 10.1021/acs.jmedchem.4c00137

[199] Lisowska A., Świątek P., Dębicki F., Lewińska A., Marciak A., Pacini L., **Papini A.M.**, Brasuń J. The Role of the Unbinding Cycle on the Coordination Abilities of the Bi-Cyclopeptides toward Cu(II) Ions (2024) Molecules, 29 (10), art. no. 2197. DOI: 10.3390/molecules29102197

[200] Mert A., Tatini D., Fidi A., Pacini L., Quagliata M., Nuti F., **Papini A.M.**, Lo Nostro P. A Promising Compound for Green Multiresponsive Materials Based on Acyl Carrier Protein. Langmuir, (2024), 40, 24, 12381–12393. DOI: 10.1021/acs.langmuir.4c00476

[201] Grabeck J., Mayer J. Miltz A., Casoria M., Quagliata M., Meinberger D., Klatt A., Wielert I., Maier B. **Papini A.M.** Neundorf I. Triazole-bridged peptides with enhanced antimicrobial activity and potency against pathogenic bacteria. ACS Infectious Diseases. (2024), Publication Date: June 17, 2024. DOI: 10.1021/acsinfecdis.4c00078.

[202] P. Ledwoń, M. Jewginski, C. Bello, F. Nuti, P. Rovero, R. Latajka, **A.M. Papini**. Synthetic Strategies to Prepare Bioactive Lysine and Peptide Conjugates with Triazolium Derivatives. Eur. J. Org. Chem. 2024, e202400399. DOI : 10.1002/ejoc.202400399

Patents (Period 2005-2024)

[1] Inventors: **Papini A.M.**, Rovero P., Chelli M., Lolli F. “Glycopeptides, their preparation and use in the diagnosis or therapeutic treatment of Multiple Sclerosis”. PCT (2003) WO 03000733 A2. Italian Patent n. 0001327122 (27/04/2005). Granted USA, Australian and European Patent (02/08/2005). Applicant: University of Florence, Italy. **Licensed to IMMCO Diagnostics, Buffalo, USA.**

[2] Inventors: Pinto F., **Papini A.M.**, Chelli M., Rovero P., Lolli F. “Immuno-absorption columns for the subtraction of antibodies from blood with selective plasma filtration techniques”. PCT International Application (2003) WO 2003009887 Priority Application: IT 2001-FI144. Applicant: University of Florence, Italy.

[3] Inventors: Kaminski Z.J., **Papini A.M.**, Kolesinska B., Kolesinska J., Jastrzabek K., Sabatino G., Bianchini R. “Process for the preparation of N-triazinylammonium salts”. Filing date 07/11/2005. PCT/EP2005/055793 (2005). Applicant: Italvelluti S.p.a. Kaminski Z.J., Papini A.M., Jastrzabek K., Kolesinska B., Kolesinska J., Sabatino G., Bianchini R. “Process for the preparation of n-triazinylammonium salts”. PCT Int. Appl. (2007), 14pp. CODEN: PIXXD2 WO 2007051496 A1 20070510 AN 2007:511982 CAPLUS. **Licensed to ITALVELLUTI (Italy).**

[4] Inventors: Giuntini M., Ginanneschi M., Chelli M., **Papini A.M.** “Somatostatin analogues” Filing date 10.03.2005. EPC Application (2005) 05101866.1-2401 Priority Application: IT/10.03.04/ITA FI20040057. Applicant: Giuntini M. Inventors: Giuntini M., Ginanneschi M., Chelli M., Papini A.M. “Preparation of somatostatin analogues”. Appl. (2005), CODEN: EPXXDW EP 1598366 A1 20051123 CAN 144:7091 AN 2005:1235907 CAPLUS

[5] Inventors: Alcaro M.C., Chelli M., Lolli F., Migliorini P., Paolini I., **Papini A.M.**, Rovero P. “Galactosylated peptides, their preparation and use in autoimmune diseases diagnosis”. European patent EP2050761 B1. Applicant: Toscana Biomarkers Srl.

[6] Inventors: Pratesi F., Alcaro M.C., Chelli M., Fantini P., Lolli F., Paolini I., **Papini A.M.**, Rovero P., Migliorini P. "Detection of anti-ribosomal P protein antibodies by means of synthetic peptides". EP09167004.2 (2009). Patent application number EP10168270.6 - PCT/EP2011/061006 (2010). European patent application EP 2284188 A1 - US 2011028409 A1. Applicant: Toscana Biomarkers Srl. **Non exclusive licenses to Theradiag (France), DIESSE (Italy), DIAMETRA (Italy), Amar Immunodiagnostics (India).**

[7] Inventors: Alcaro M.C., Pratesi F., Paolini I., Chelli M., Lolli F., **Papini A.M.**, Rovero P., Migliorini P. "Method for the diagnosis of rheumatoid arthritis". Patent application number EP11167420.6. (2011). Applicant: Toscana Biomarkers Srl. **Non exclusive licenses to Theradiag (France), DIESSE (Italy), DIAMETRA (Italy), Amar Immunodiagnostics (India).**

[8] Inventors: Pratesi F., Alcaro M.C., Chelli M., Lolli F., Paolini I., Papini A.M., Rovero P., Migliorini P. "Histone citrullinated peptides and uses thereof". European patent application EP2402368 A1 - WO2012001103 A1. Applicant: Toscana Biomarkers Srl. **Non exclusive licenses to Theradiag (France), DIESSE (Italy), DIAMETRA (Italy), Amar Immunodiagnostics (India).** MoD&LS produces the peptide antigens for DIAMETRA

[9] Inventors: Denat F., D'Addona D., Bernhard C., Papini-Rovero A.M., Chorev M.. "Clicked somatostatin conjugated analogs for biological applications". EP 11193530, 14.12.2011. Applicants: Université de Cergy-Pontoise CNRS and Université de Bourgogne.

[10] Inventors: Hayek J., De Felice C., Papini A.M., Rovero P., Nuti F., Real-Fernandez F., Sabatino G., Tiberi C. "Nuovi peptidi glicosilati". Italian patent application FI2012000107 (25/05/2011). Applicant: Azienda Ospedaliera Universitaria Senese. **Licensed to Toscana Biomarkers (Italy).**

[11] Inventors: Errante F., Giovannelli L., Papini A.M., Rovero P. Nuovo principio attivo cosmeceutico. "Bioactive peptides and compositions comprising them". EP3 980 134B1. Priority: 07.06.2019 IT 201900008364. Applicants: Espikem Srl (80%), Università di Firenze (20%). US Patent App. 17/615,201

Other Publications (PhD Thesis, Notes and Editorials)

[1] **A.M. Papini.** Synthesis of peptides and investigation of their chimica, biopharmacological and immunological profile. PhD tesi in Chemical Sciences. (I International cycle and III National Cycle. Fellowship from the Italian Ministry of Education (BORSA MINISTERO DELLA PUBBLICA ISTRUZIONE). National Library in Rome and Florence (1990) 1-118.

[2] **A.M. Papini.** Towards peptide-based diagnostics. CHIMICA OGGI-CHEMISTRY TODAY 2009; 27(2):2. Published by TEKNOSCIENZE PUBL, VIALE BRIANZA 22, 20127 MILANO, ITALY, MARCH-APRIL 2009

[3] **A.M. Papini.** Cosmetics toward peptide-based cosmeceutics. CHIMICA OGGI-CHEMISTRY TODAY 2010, 28, 6, 3-4. NOTE Published by TEKNOSCIENZE PUBL, VIALE BRIANZA 22, 20127 MILANO, ITALY, NOVEMBER-DECEMBER 2010

[4] **A.M. Papini.** Peptide chemistry revolution. CHIMICA OGGI-CHEMISTRY TODAY 2012, 30(2), 22-23. NOTE

Published by TEKNOSCIENZE PUBL, VIALE BRIANZA 22, 20127 MILANO, ITALY, MARCH-APRIL 2012

[5] **Papini AM**, Lavielle S, Lubell WD. Co-editors and PIPS organizers. Peptides in Paris. EDITORIALE - SPECIAL ISSUE. BIOPOLYMERS 2015; 104(5):v-vii. DOI: 10.1002/bip.22738 IF: 1,99 - Citations: 0 (Scopus); 0 (WoS); Published by WILEY-BLACKWELL, 111 RIVER ST, HOBOKEN 07030-5774, NJ USA, SEPTEMBER 2015

[6] **A.M. Papini**. Meet Our Regional Editor. PROTEIN AND PEPTIDE LETTERS 2017, 24(3), 189. EDITORIAL
Published by BENTHAM SCIENCE PUBLISHERS, MARCH 2017.

[7] **A.M. Papini**, V. Schettino. L'intelligenza artificiale manderà l'esperimento in soffitta? December 9, 2020. Colombaria Oggi. Rivista online. <http://www.colombaria.it/rivistaonline/archives/1410>