

CURRICULUM VITAE OF PROF. ALBERTO DI DONATO

- | | |
|-----------------|---|
| 1949 25 January | - Born in Naples. |
| 1972 21 July | - "Laurea" (PhD equivalent) in Chemistry "summa cum laude". |
| 1972 September | - "Assistente Incaricato" of Biological Chemistry, University of Naples. |
| 1973 January | - Consiglio Nazionale delle Ricerche postdoctoral fellow, University of Naples. |
| 1975 April | - Research Associate, University of Naples. |
| 1977 May | - Guest at the Pasteur Institute, Paris. |
| 1979 January | - Professor In charge of Biological Chemistry (1979-1985), University of Naples. |
| 1980 June | - Guest at the Stein & Moore Laboratory, The Rockefeller University, New York. |
| 1981 July | - Visiting Assistant Professor at The Rockefeller University, New York, (3 months). |
| 1981 | - Senior Research Associate, University of Naples. |
| 1982 January | - Professor of Biochemistry, National Somali University. |
| 1982 July | - Visiting Assistant Professor at The Rockefeller University, New York, (3 months). |
| 1985 July | - Associate Professor of Biological Chemistry, University of Naples. |
| 1985 August | - Visiting Associate Professor at The Rockefeller University, New York, (1 year). |
| 1986 November | - Adjunct Faculty Member at The Rockefeller University. |
| 1989-1999 | - Professor of Techniques of Protein Engineering at the Specialization School of Biotechnology, University of Naples Federico II. |
| 1990 November | - Professor of Biological Chemistry, University of Naples Federico II. |
| 1993 June | - Visiting Professor at Harvard Medical School, Boston (Prof. Bert. L. Vallee's laboratory). |
| 2000 - 2006 | - Member of the FEBS (Federation of European Societies of Biochemistry) Fellowship Committee |
| 2001- | - Professor of Basic Chemistry at the University S. Orsola Benincasa |

Academic duties

- | | |
|------------|--|
| 1996-2007 | - Member of the Academic Senate of the University of Naples Federico II. |
| 1993-1997 | - Director of the Advanced School of Biotechnology, University of Naples Federico II. |
| 1997-1999 | - Director of the Diploma Course of Chemical and Biological Analyses of the Faculty of Sciences of the University of Naples Federico II. |
| 1999- 2001 | - President of the Laurea Course in Biological Sciences (II) of the Faculty of Sciences of the University of Naples Federico II. |
| 1999-2007 | - President of the Research Committee of the Academic Senate of the University of Naples |

	Federico II
2006-	- President of the trilateral Committee between the Compagnia di San Paolo, Istituto Banco di Napoli - Fondazione and the University of Naples Federico II.
2001-2007	- Dean of the Faculty of Sciences of the University of Naples Federico II.
2007-2008	- President of OPAR (Permanent Observatory of the Research Activity) of the University of Naples Federico II.
2008-2009	- Delegate of the Rector for Research Activities
2008-2010	- Member of the Executive Office of the University Center for Information Services of the University of Naples Federico II.
2010 (December)-2012	Director of Center for Communication and Innovation (COINOR), University of Naples Federico II.
2012 (October)-2016	Member of Management Board of the University of Naples Federico II.

Non-academic duties

2003-2005	- President of the Board of Trustees for the promotion of scientific research in Campania
2006- to date	- Member of the Scientific Committee of Biogem s.c.a.r.l.
2007-2008	- Member of the Executive Office of the Fondazione IDIS-Città della Scienza
2008-2010	- President of Città della Scienza SpA
2008- to date	- Member of the Executive Office of Bioteknet SCpA

Awards

2006-	- Premio Dorso for the promotion of Science in the South of Italy
-------	---

Scientific profile: Prof. Di Donato has focused his research themes on the structure-to-function relationships in proteins. Some representative scientific research themes are:

- Structure and enzymology of bovine nucleases;
- Production of ribonucleases with pharmacological potential by means of protein engineering;
- Functional and structural properties of HbA and HbS;
- Identification and isolation of amino acid and peptide neuro-effectors;
- PLP-enzymes from eukaryotes and prokaryotes;
- RIP (ribosome inactivating proteins) as potential biopesticides;
- antimicrobial peptides.

More recently Prof. Di Donato and his research group scientific interest has moved to environmental themes, using proteomic approaches. Representative research themes are:

- Oxygenase complexes and their use in the bioremediation of contaminations by chemical compounds;
- Use of enzymes and microbial cells for biotransformation processes based on waste treatment.

Memberships: Since 2020 Prof. Di Donato is Emeritus Professor of

Biochemistry.

In 2006 Professor Di Donato has been awarded of Premio Dorso for the promotion of scientific research in the South of Italy.

Since 2003 he is Member of the "Accademia Nazionale di Scienze Lettere e Arti". Since 2017 he is resident member of the Natural Sciences Section Sezione di Scienze Naturali, and since 2019 he is Resident member "Accademia Nazionale di Scienze Lettere e Arti".

Prof. Di Donato is a member of the Italian Society of Biochemistry, the Italian Society of Chemistry, the Harvey Society (USA) and the Protein Society (USA).

Between 1995 and 2000 he has been a member of the Executive Board of the Italian Society of Biochemistry and Molecular Biology.

In 1999 he served as Delegate of the at the European Federation of Biotechnology. During 2000 and 2005 he served as a Member of the Fellowship Committee of the European Federation of Biotechnology (FEBS).

PUBLICATIONS

- P1) **Di Donato A.**, Parente A., D'Alessio G.
Studio dei Ponti Disolfurici della RNAasi BS-1 con il Metodo della Elettroforesi in Diagonale.
[**Rend. Acc. Sci. Fis. Mat., Napoli \(1972\) Ser.IV, 39, 26-31.**](#)
- P2) Malorni MC., **Di Donato A.**, D'Alessio G.
Reattività Differenziale dei Ponti Disolfurici della RNAasi BS-1.
[**Boll. Soc. Ital. Biol. Sper. \(1972\) 48, 603-606.**](#)
- P3) D'Alessio G., **Di Donato A.**, Malorni MC., Parente A.
The Role of Disulfide Bridges in the Dimeric Structure of RNAase BS-1.
[**Acta Vitaminologica et Enzymologica \(1972\) 5-6.**](#)
- P4) **Di Donato A.**, D'Alessio G.
Interchain Disulfide Bridges in Ribonuclease BS-1.
[**Biochem. Biophys. Res. Commun. \(1973\) 55, 919-928.**](#)
- P5) Libonati M., Sorrentino S., Galli R., La Montagna R., **Di Donato A.**
Degradation of DNA-RNA Hybrids by Aggregates of Pancreatic Ribonuclease.
[**Biochim. Biophys. Acta \(1975\) 407, 292-298.**](#)
- P6) **Di Donato A.**, Formica C.
Eterogeneità della Ribonucleasi Seminale Bovina.
[**Rend. Acc. Sci. Fis. Mat. \(1977\) Ser. IV, 44, 113-119.**](#)
- P7) **Di Donato A.**
The Binding of Ligands to Proteins: Methodological Approaches.
[**Italian J. Biochem. \(1979\) 28, 305-306.**](#)
- P8) **Di Donato A.**, D'Alessio G.
Intrachain Disulfide Bridges of Bovine Seminal Ribonuclease.
[**Biochim. Biophys. Acta \(1979\) 579, 303-313.**](#)
- P9) D'Alessio G., **Di Donato A.**, Furia A., Leone E., Libonati M., Parente A., Suzuki H.
Bull Semen RNAase Revisited.
[**J. Mol. Biol. \(1981\) 146, 269-274.**](#)
- P10) **Di Donato A.**, D'Alessio G.
Heterogeneity of Bovine Seminal Ribonuclease.
[**Biochemistry \(1981\) 20, 7232-7237.**](#)
- P11) Piccoli R., **Di Donato A.**, Dudkin S., D'Alessio G.
Bovine Seminal Ribonuclease: Non-hyperbolic Kinetics in the Second Reaction Step.
[**FEBS Lett. \(1982\) 140, 307-310.**](#)
- P12) D'Alessio G., **Di Donato A.**, Jaffe' K., Maldonado H., Zabala NA.
Arginine and Memory Consolidation in Praying Mantis.
[**J. Comp. Physiol. A \(1982\) 147, 231-235.**](#)

- P13) Andini S., D'Alessio G., **Di Donato A.**, Paolillo L., Piccoli R., Trivellone E.
Comparative NMR Studies of Bovine Semen and Pancreas Ribonucleases.
Biochim. Biophys. Acta (1983) 742, 530-538.
- P14) **Di Donato A.**, Fiore R., Garzillo AM., Marino G.
Interaction of AMP with Cytosolic Apo-Aspartate Aminotransferase.
FEBS Lett. (1983) 153, 98-102.
- P15) Acharya AS., **Di Donato A.**, Manjula BN., Fischetti VA., Manning JM.
Influence of Trifluoroacetic Acid on Retention Times of Histidine Containing Tryptic Peptides in Reverse Phase HPLC.
Int. J. of Peptides and Protein Res. (1983) 22, 78-82.
- P16) **Di Donato A.**, Fantl WJ. , Acharya AS. , Manning JM.
Selective Carboxymethylation of the α -Amino Groups of Hemoglobin. Effect on Functional Properties.
J. Biol. Chem. (1983) 258, 11890-11895.
- P17) D'Alessio G., **Di Donato A.**, Parente A.
Exorphins from Milk Proteins.
Clinic. Neuropharm. (1984) 7, Suppl. 1, 364-365.
- P18) Manning JM., Acharya AS. , **Di Donato A.**, Fantl WJ. , Jones WM. Mori N., Pospichil MA., Ueno H.
Factors that Influence the Reaction of the Amino Groups of Hemoglobin S with Different Compounds.
in "Approaches to the Therapy of Sickle Cell Anemia" (1985), Beuzard, Y, Charache, S., Galacteros, F. eds., Vol. 141, pp. 195-200, Les Editions INSERM. ISBN 9782855982878.
- P19) Fantl WJ., **Di Donato A.**, Arnone A., Manning JM.
Carboxymethylated Hemoglobin as a Structural Analog for Carbamino Hemoglobin.
in "Proteins: Structure and Function" (1986), L'Italien, J.J. ed., pp. 141-147, Plenum Press, New York, ISBN 0306422999.
- P20) Tamburrini M., Piccoli R., De Prisco R., **Di Donato A.**, D'Alessio G.
Fast and High-Yielding Procedures for the Isolation of Bovine Seminal RNAase.
Italian J. Biochem. (1986) 35, 22-32.
- P21) Donadio S., Tamburrini M. **Di Donato A.**, Piccoli R., D'Alessio G.
Site-Directed Alkylation and Site-Site Interactions in Bovine Seminal Ribonuclease.
Eur. J. Biochem. (1986) 157, 475-480.
- P22) **Di Donato A.**, Galletti P., D'Alessio G.
Selective Deamidation and Enzymatic Methylation of Seminal Ribonuclease.
Biochemistry (1986) 25, 8361-8368.

- P23) Manning JM., Soper TS., Recsei P., **Di Donato, A.**, Merola M., Ueno H.
Enzyme-Activated Inhibitors of Bacterial D-Amino Acid Transaminase as Antimicrobial Agent.
in "Biochemistry of Vitamin B6" (1987), Karpela, T., Christen, P. eds., pp. 305- 315, Birkhauser Verlag, Basel. ISBN 3764319429.
- P24) **Di Donato A.**, Piccoli R., D'Alessio, G.
Co-operativity in Seminal Ribonuclease Function: Binding Studies.
Biochem. J. (1987) 241, 435-440.
- P25) Fanti WJ. , Manning, LR., Ueno H., **Di Donato A.**, Manning JM.
Properties of Carboxymethylated Cross-Linked Hemoglobin A.
Biochemistry (1987) 26, 5755-5761.
- P26) Fanti WJ. , **Di Donato A.**, Manning JM., Rogers PH., Arnone A.
Specifically Carboxymethylated Hemoglobin as an Analogue of Carbamino Hemoglobin: Solution and X-Ray Studies of Carboxymethylated Hemoglobin and X-Ray studies of Carbamino Hemoglobin.
J. Biol. Chem. (1987) 26, 12700-12713.
- P27) Ingrosso D., Iardino P., Galletti P., Ciardiello MA., **Di Donato A.**, D'Alessio G.
Does Enzymatic Methyl Esterification Represent a "Repair" Mechanism of Isopeptide Bonds in Proteins?
Italian J. Biochem. (1988) 36, 299-302.
- P28) Galletti P., Ciardiello A., Ingrosso D., **Di Donato A.**, D'Alessio G.
Repair of Isopeptide Bonds by Protein Carboxy O-Methyltransferase: Seminal RNase as a Model System.
Biochemistry (1988) 27, 1752-1757.
- P29) Piccoli R., **Di Donato A.**, D'Alessio G.
Co-operativity in Seminal Ribonuclease Function: Kinetic Studies.
Biochem. J. (1988) 253, 329-336.
- P30) D'Alessio G., **Di Donato A.**, Parente A., Piccoli R.
The Importance of Being Dimeric for a Ribonuclease.
in "Structure and Chemistry of Ribonucleases" (1989), Pavlovsky, A., Polyakov, K. eds., pp. 85-94, Moscow.
- P31) Merola M., Martinez del Pozo A., Ueno H., Recsei P., **Di Donato A.**, Manning JM., Tanizawa K., Masu Y., Asano S., Tanaka H., Soda K., Ringe D., Petsko G.A.
Site-Directed Mutagenesis of the Cysteinyl Residues and the Active Site Serine Residue of Bacterial D-Amino Acid Transaminase.
Biochemistry (1989) 28, 505-509.
- P32) Ambrosino R., Barone G., Castronuovo, G., Cultrera O., **Di Donato A.**, Elia V.
A Calorimetric Approach to the Study of the Interactions of Cytidine-3'-Phosphate with Bovine Seminal Ribonuclease.
Biopolymers (1989) 28, 1403-1411.
- P33) Tamburrini M., Piccoli R., Picone D., **Di Donato A.**, D'Alessio G.

Dissociation and Reconstitution of Bovine Seminal RNAase: Construction of a Hyperactive Hybrid Dimer.
J. Prot. Chem. (1989) 8, 719-731.

- P34) **Di Donato A.**, Ciardiello MA., Piccoli R., D'Alessio G.
Protein Deamidation and Ageing in a Model System: Bovine Seminal and Pancreatic Ribonucleases.
in "Protein Metabolism in Aging" (1990), Segal HL., Rothstein M., Bergamini E.eds. pp. 33-42, Wiley-Liss, Inc., New York. ISBN 0471567639.
- P35) Piccoli R., Ciardiello MA., de Nigris M., Fiore F., Grumetto L., Mastronicola MR., Russo G., Russo N., Verde C., **Di Donato A.**, Parente A. Pietropaolo T., D'Alessio G.
Engineering of Seminal RNAase: First Steps Towards the Construction of Chimaeric Ribonucleases.
in "Structure, Function and Mechanism of Ribonucleases" (1990), Cuchillo C. ed., pp.131-137, IBF Publications, Barcelona (Spain) ISBN 8460406385.
- P36) D'Alessio G., **Di Donato A.**, Parente A., Piccoli R.
Seminal RNase: a Unique Member of the Ribonuclease Superfamily.
Trends Biochem. Sci. (1991) 16, 104-106.
- P37) Piccoli R., Tamburrini M., Piccialli G., **Di Donato A.**, Parente A., D'Alessio G.
The dual-mode quaternary structure of seminal RNase.
Proc. Natl. Acad. Sci. USA (1992) 89, 1870-1874.
- P38) Libertini G., **Di Donato A.**
Computer-aided Gene Design.
Prot. Engineering (1992) 5, 821-825.
- P39) **Di Donato A.**, Ciardiello MA., de Nigris M., Piccoli R., Mazzarella L., D'Alessio G.
Selective Deamidation of Ribonuclease A.
J. Biol. Chem. (1993) 268, 4745-4751.
- P40) de Nigris M., Russo N., Piccoli R., D'Alessio G., **Di Donato A.**
Expression of Bovine Seminal Ribonuclease in Escherichia coli.
Biochem. Biophys. Res. Commun. (1993) 193, 155-160.
- P41) Russo N., de Nigris M., **Di Donato A.**, D'Alessio G.
Expression of Native Dimers of Bovine Seminal Ribonuclease in an Eucaryotic Cell System.
FEBS Lett. (1993) 318, 242-244.
- P42) **Di Donato A.**, de Nigris M., Russo N., Di Biase S., D'Alessio G.
A Method for Synthesizing Genes and cDNAs by the Polymerase Chain Reaction.
Anal. Biochem. (1993) 212, 291-293.
- P43) **Di Donato A.**, Cafaro V., de Nigris M., Rizzo M., D'Alessio G.
The Determinants of the Dimeric Structure of Seminal Ribonuclease are Located in its N-Terminal Region.
Biochem. Biophys. Res. Commun. (1993) 194, 1440-1445.

- P44) Russo N., de Nigris M., Ciardiello MA., **Di Donato A.**, D'Alessio G. *Expression in Mammalian Cells, Purification and Characterization of Recombinant Human Pancreatic Ribonuclease.*
[FEBS Lett. \(1993\) 333, 233-237.](#)
- P45) **Di Donato A.**, Cafaro V., de Nigris M., Minopoli G., D'Alessio G. *Engineering of Bovine Seminal Ribonuclease: Expression of the Secreted Recombinant Protein.*
in "Chemistry and Properties of Biomolecular Systems", vol.2 (1994) pp. 187-192, Russo, N., Anastassopoulou, J., Barone G. eds., Kluwer Academic Publishers. ISBN 0792326660.
- P46) Libertini G., **Di Donato A.** *Reconstruction of Ancestral Sequences by the Inferential Method, a Tool for Protein Engineering Studies.*
[J. Mol. Evol. \(1994\) 39, 219-229.](#)
- P47) **Di Donato A.**, Cafaro V., D'Alessio G. *Ribonuclease A can be Transformed into a Dimeric Ribonuclease with Antitumor Activity.*
[J. Biol. Chem. \(1994\) 269, 17394-17396.](#)
- P48) Grimaldi D., **Di Donato A.** *A versatile PCR procedure which allows colony screening within a few hours.*
[Minerva Biotec. \(1995\) 7, 214-216.](#)
- P49) Cafaro V., De Lorenzo C., Piccoli R., Bracale A., Mastronicola MR., **Di Donato A.**, D'Alessio G. *The antitumor action of seminal ribonuclease and its quaternary conformations.*
[FEBS Lett. \(1995\) 359, 31-34.](#)
- P50) Adinolfi BS., Cafaro V., D'Alessio G., **Di Donato A.** *Full antitumor action of recombinant seminal ribonuclease depends on the removal of its N-terminal methionine.*
[Biochem. Biophys. Res. Commun. \(1995\) 213, 525-532.](#)
- P51) **Di Donato A.**, Cafaro V., Romeo I., D'Alessio G. *Hints on the evolutionary design of a dimeric RNase with special bioactions.*
[Protein Sci. \(1995\) 4, 1470-1477.](#)
- P52) Russo A., Nobile V., **Di Donato A.**, Riordan JF., Vallee BL. *The C-terminal helix of human angiogenin has a dual role in its enzymatic activity.*
[Proc. Natl. Acad. Sci. USA \(1996\) 93, 3243-3247.](#)
- P53) Capasso S., **Di Donato A.**, Esposito L., Sica F., Sorrentino G., Vitagliano L., Zagari A., Mazzarella L. *Deamidation of Proteins: The crystal structure of bovine pancreatic ribonuclease with an isoaspartyl residue at position 67.*
[J. Mol. Biol. \(1996\) 257, 492-496.](#)
- P54) Catanzano F., Graziano G., Cafaro V., D'Alessio G., **Di Donato A.**, Barone G.

From Ribonuclease A toward Bovine Seminal Ribonuclease: A Step by Step Thermodynamic Analysis.
Biochemistry (1997), 36, 14403-14408.

- P55) D'Alessio G., **Di Donato A.**, Mazzarella L., Piccoli R.
Seminal Ribonuclease: the importance of diversity.
In Ribonucleases: Structure and Functions (1997), D'Alessio G, Riordan JF, eds, pp. 383-423, Academic Press Inc, San Diego. ISBN 0125889453.
- P56) Barone G., Catanzano F., Graziano G., Cafaro V., D'Alessio G., **Di Donato A.**
Thermodynamic stability of a monomeric derivative of bovine seminal ribonuclease.
In Stability and Stabilization of Biocatalysts, (1998) Ballesteros A., Plou F.J., Iborra J.L., Halling P. eds, pp.211-216, Elsevier Science B.V., Amsterdam. ISBN 0444829709.
- P57) Catanzano F., Graziano G., Cafaro V., D'Alessio G., **Di Donato A.**, Barone G.
Circular dichroism study of ribonuclease A mutants containing the minimal structural requirements for dimerization and swapping.
Int. J. of Biological Macromolecules (1998) 23, 277-285.
- P58) Cafaro V., Bracale A., Di Maro A., Sorrentino S., D'Alessio G., **Di Donato A.**
New Muteins of RNase A with Enhanced Antitumor Action.
FEBS Lett (1998) 437, 149-152.
- P59) Del Vecchio Blanco F., Cafaro V., Di Maro A., Scognamiglio R., Siniscalco G., Parente A., **Di Donato A.**
A Recombinant Ribosome-Inactivating Protein from the Plant Phytolacca dioica L. Produced from a Synthetic Gene.
FEBS Lett (1998) 437, 241-245.
- P60) Cafaro V., Bracale A., Formiggini F., Notomista E., D'Alessio G., **Di Donato A.**
Protein engineering of ribonucleases.
Biochimie (1998) 80, 905-909.
- P61) Notomista E., Cafaro V., Fusillo R., Bracale A., D'Alessio G., **Di Donato A.**
Effective expression and purification of recombinant onconase, an antitumor protein.
FEBS Lett (1999) 463, 211-215.
- P62) El-Joubary A., Bruix M., Santoro J., Cafaro V., Scognamiglio R., **Di Donato A.**, D'Alessio G., Kovér KE., Batta Gy., Szilagy L., Rico M.
¹H and ¹⁵N sequential assignment and solution secondary structure of ¹⁵N labelled human pancreatic ribonuclease.
J. Biomolec. NMR (1999) 15, 265-266.
- P63) Notomista E., Catanzano F., Graziano G., Dal Piaz F., Barone G., D'Alessio G., **Di Donato A.**
Onconase: An Unusually Stable Protein.
Biochemistry (2000) 39, 8711-8718.

- P64) Graziano G., Notomista E., Catanzano F., Barone G., **Di Donato A.**
Thermal stability of onconase and some mutant forms.
[**Biocatalysis and Biotransformation \(2001\) 19, 459-468.**](#)
- P65) D'Alessio G., **Di Donato A.**, Piccoli R., Russo N.
Seminal Ribonuclease: Procedures for the Preparation of Natural and Recombinant Enzyme, of its Quaternary Isoforms, of its Isoenzymes, of Monomeric Forms; an Assay for the Selective Cytotoxicity of the Enzyme.
[**Methods in Enzymol \(2001\) 341, 248-263.**](#)
- P66) Spadaccini R., Crescenzi O., Tancredi T., De Casamassimi N., Saviano G., Scognamiglio R., **Di Donato A.**, Temussi, PA.
Solution structure of a sweet protein: NMR study of MNEI, a single chain monellin.
[**J. Mol. Biol. \(2001\) 305, 505-514.**](#)
- P67) Carotenuto G., Lapegna MG., Zollo G., **Di Donato A.**, Nicolais L.
Evaluating Research Performance: The Strategy of the University of Naples Federico II (Italy).
[**Higher Education Policy \(2001\) 14, 75-90.**](#)
- P68) Scognamiglio R., Notomista E., Barbieri P., Pucci P., Dal Piaz F., Tramontano A., **Di Donato A.**
Conformational analysis of putative regulatory subunit D of the toluene/o-xylene-monoxygenase complex from Pseudomonas stutzeri OX1.
[**Protein Sci. \(2001\) 10, 482-490.**](#)
- P69) Notomista E., Catanzano F., Graziano G., Di Gaetano S., Barone G., **Di Donato A.**
Contribution of chain termini to the conformational stability and biological activity of onconase.
[**Biochemistry \(2001\) 40, 9097-9103.**](#)
- P70) Cafaro V., Scognamiglio R., Viggiani A., Izzo V., Passaro I., Notomista E., Dal Piaz F., Amoresano A., Casbarra A., Pucci P., **Di Donato A.**
Expression and purification of the recombinant subunits of toluene/o-xylene monoxygenase and reconstitution of the active complex.
[**Eur. J. Biochem. \(2002\) 269, 5689-5699.**](#)
- P71) Notomista E., Lahm A., **Di Donato A.**, Tramontano, A.
Evolution of Bacterial Multicomponent Monoxygenases.
[**J. Mol. Evol. \(2003\) 56, 435-445.**](#)
- P72) Merlini A., Di Fiore A., Carannante, A. Notomista E., **Di Donato A.**, Mazzarella L., Sica F.
Effects of point mutations on the highly rigid structure of onconase, a cancer chemotherapeutic.
[**Electra Synchroton Light Laboratory – Highlights 2003-2004, p. 50-52 \(2004\).**](#)
- P73) Cafaro V., Izzo V., Scognamiglio R., Notomista E., Capasso P., Casbarra A., Pucci P., **Di Donato A.**

Phenol hydroxylase and toluene/o-xylene monooxygenase from Pseudomonas stutzeri OX1: interplay between two enzymes.

[Appl. Environ. Microbiol. \(2004\) 70, 2211-2219.](#)

- P74) Sazinsky MH., Bard J., **Di Donato A.**, Lippard SJ.
Crystal structure of the Toluene/o-Xylene Monooxygenase Hydroxylase from Pseudomonas stutzeri OX1: Insight into the substrate specificity, substrate channeling and active site tuning of multicomponent monooxygenases.
[J. Biol. Chem. \(2004\) 279, 30600-30610.](#)
- P75) Leone S., Izzo V., Silipo A., Sturiale L., Garozzo D., Lanzetta R., Parrilli M., Molinaro A., **Di Donato A.**
A novel type of highly negatively charged lipooligosaccharide from pseudomonas stutzeri OX1 possessing two 4,6-O-(1-carboxy)-ethylidene residues in the outer core region.
[Eur. J. Biochem. \(2004\) 271, 2691-2704.](#)
- P76) Leone S., Izzo V., Silipo A., Sturiale L., Garozzo D., Lanzetta R., Parrilli M., Molinaro A., **Di Donato A.**
Structure of minor oligosaccharides from the lipopolysaccharide fraction from Pseudomonas stutzeri OX1.
[Carbohydrate Res. \(2004\) 339, 2657-2665.](#)
- P77) Viggiani A., Siani L., Notomista E., Birolo L., Pucci P., **Di Donato A.**
The role of conserved residues H246, H199 and Y255 in the catalysis of catechol 2,3-dioxygenase from Pseudomonas stutzeri OX1.
[J. Biol. Chem. \(2004\) 279, 48630-48639.](#)
- P78) Leone S., Izzo V., Lanzetta R., Parrilli M., Molinaro A., **Di Donato A.**
The structure of the O-polysaccharide from Pseudomonas stutzeri OX1 containing two different 4-acylamido-4,6-dideoxy-residues, tomosamine and perosamine.
[Carbohydr Res. \(2005\) 340, 651-656.](#)
- P79) Merlino A., Mazzarella L., Carannante A., Di Fiore A., **Di Donato A.**, Notomista E., Sica, F.
The importance of dynamic effects on the enzyme activity: X-ray structure and molecular dynamics of onconase mutants.
[J. Biol. Chem. \(2005\) 280, 17953-17960.](#)
- P80) Cafaro V., Notomista E., Capasso P., **Di Donato A.**
Regiospecificity of two multicomponent monooxygenases from Pseudomonas stutzeri OX1: molecular basis for the catabolic adaptation of the microorganism to methylated aromatic compounds.
[Appl. Environ. Microbiol. \(2005\) 71, 4736-4743.](#)
- P81) Cafaro V., Notomista E., Capasso P., **Di Donato A.**
Mutation of glutamic-103 of toluene o-xylene monooxygenase as a control of the catabolic efficiency of a recombinant upper pathway for the degradation of methylated aromatic compounds.
[Appl. Environ. Microbiol. \(2005\) 71, 4744-4750.](#)
- P82) Izzo V., Notomista E., Picardi A., Pennacchio F., **Di Donato A.**

The thermophilic archaeon Sulfolobus solfataricus is able to grow on phenol.

Research in Microbiology (2005) 156, 677-689.

- P83) Viggiani A., Olivieri G., Siani L., **Di Donato A.**, Marzocchella A., Salatino P.
An airlift bioreactor for the biodegradation of phenol by Pseudomonas stutzeri OX1.
J. Biotech. (2006) 123, 464-477.
- P84) Siani L., Papa R., **Di Donato A.**, Sannia G.
Recombinant expression of Toluene o-Xylene Monooxygenase (ToMO) from Pseudomonas stutzeri OX1 in the marine Antarctic bacterium Pseudoalteromonas haloplanktis TAC125.
J. Biotech. (2006) 126, 334-341.
- P85) Siani L., Viggiani A., Notomista E., Pezzella A., **Di Donato A.**
The role of residue Thr249 in modulating the catalytic efficiency and substrate specificity of catechol 2,3-dioxygenase from Pseudomonas stutzeri OX1.
FEBS J. (2006) 273, 2963-2976.
- P86) Notomista E., Mancheño J.M., Crescenzi O., **Di Donato A.**, Gavilanes J., D'Alessio G.
The role of electrostatic interactions in the antitumor activity of dimeric RNases.
FEBS J. (2006) 273, 3687-3697.
- P87) Leone S., Molinaro A., Alfieri F., Cafaro V., Lanzetta R., **Di Donato A.**, Parrilli M.
The biofilm matrix of Pseudomonas sp. OX1 grown on phenol is mainly constituted by alginic oligosaccharides.
Carbohydr Res. (2006) 341, 2456-2461.
- P88) Sazinsky MH., Dunten PW., McCormick MS., **Di Donato A.**, Lippard SJ.
X-ray structure of a hydroxylase-regulatory protein complex from a hydrocarbon-oxidizing multicomponent monooxygenase, Pseudomonas sp. OX1 phenol hydroxylase.
Biochemistry (2006) 45, 15392-15404.
- P89) Lodato A., Alfieri F., Olivieri G., **Di Donato A.**, Marzocchella A., Salatino P.
Azo-dye conversion by means of Pseudomonas sp. OX1.
Enzyme Microb Tech (2007) 41, 646-652.
- P90) Leone S., Lanzetta R., Scognamiglio R., Alfieri F., Izzo V., **Di Donato A.**, Parrilli M., Holst O., Molinaro A.
The structure of the O-specific polysaccharide from the lipopolysaccharide of Pseudomonas sp. OX1 cultivated in the presence of the azo dye Orange II.
Carbohydr Res. (2008) 343, 674-684.
- P91) Notomista E., Cafaro V., Bozza G., **Di Donato A.**
The Molecular Determinants of the Regioselectivity of Toluene, o-Xylene Monooxygenase from Pseudomonas sp. OX1.
Appl. Environ. Microbiol. (2009) 75, 823-836.

- P92) Olivieri G., **Di Donato A.**, Marzochella A., Salatino P.
Bioreactors for Azo-dye conversion.
[in Biodegradation of Azo Dyes \(2010\), H. Atacag Erkurt ed., pp. 101-131, Springer-Verlag Berlin Heidelberg. ISBN 9783642118463.](#)
- P93) Izzo V., Notomista E., Scognamiglio R., Troncone L., Donadio G.,
Di Donato A.
The Catalytic Potential of Recombinant Bacterial Multicomponent Monooxygenases ToMO and PH For the Synthesis of Antioxidant Tyrosol and Hydroxytyrosol in the Strain E.coli/JM109.
[in Metabolism and molecular systems for the biotransformation of aromatic molecules \(2010\) pp. 33-40. ISBN 9788874780150.](#)
Open Archive of the University of Naples
(<http://www.fedoa.unina.it/3695>)
- P94) Notomista E., Pennacchio F., Cafaro V., Izzo V., Troncone L., Varcamonti M., **Di Donato A.**
Novosphingobium sp. PP1Y Has Adapted to Use the Aromatic Fraction of Fuels Oils as the Sole Carbon and Energy Source.
[in Metabolism and molecular systems for the biotransformation of aromatic molecules \(2010\) pp. 41-49. ISBN 9788874780150.](#)
Open Archive of the University of Naples
(<http://www.fedoa.unina.it/3695>)
- P95) Olivieri G., Russo ME., Napoli F., Di Donato A., Marzocchella A., Salatino P.
Characterization of the growth kinetics of Pseudomonas sp. OX1 on phenol: continuous culture under controlled unstable steady state conditions.
[J. Biotech. \(2010\) 150, 394-394.](#)
- P96) Olivieri G., Russo ME., **Di Donato A.**, Marzocchella A., Salatino P.
Unstable steady state operations of substrate inhibited cultures by dissolved oxygen control.
[J. Biotech. \(2011\) 156, 302-308.](#)
- P97) Izzo V., Leo G., Scognamiglio R., Troncone L., Birolo L., **Di Donato A.**
PHK from phenol hydroxylase of Pseudomonas sp. OX1. Insight into the role of an accessory protein in Bacterial Multicomponent Monooxygenases.
[Arch. Biochem. Biophys. \(2011\) 505, 48-59.](#)

- P98) Notomista E., Pennacchio F., Cafaro V., Smaldone G., Izzo V., Troncone L., Varcamonti M., **Di Donato A.**
The marine isolate Novosphingobium sp. PP1Y shows specific adaptation to use the aromatic fraction of fuels as the sole carbon and energy source.
[**Microb. Ecol. \(2011\) 61, 582-594.**](#)
- P99) D'Argenio V., Petrillo M., Cantiello P., Naso B., Cozzuto L., Notomista E., Paolella G., **Di Donato A.**, Salvatore F.
De novo sequencing and assembly of the whole genome of Novosphingobium sp. PP1Y.
[**J. Bacteriol. \(2011\) 193, 4296.**](#)
- P100) Notomista E., Scognamiglio R., Troncone L., Donadio G., Pezzella A., **Di Donato A.**, Izzo V.
Tuning the specificity of recombinant multicomponent monooxygenase ToMO from Pseudomonas sp. OX1 for the biosynthesis of tyrosol from 2-phenylethanol.
[**Appl. Environ. Microbiol. \(2011\) 77, 5428-5437.**](#)
- P101) Bertini L., Cafaro V., Proietti S., Caporale C., Capasso P., Caruso C., **Di Donato A.**
Deepening TOL and TOU catabolic pathways of Pseudomonas sp. OX1: cloning, sequencing and characterization of the lower pathways.
[**Biochimie \(2013\) 95, 241-50**](#)
- P102) Cafaro V., Izzo V., Notomista A., **Di Donato A.**
Marine hydrocarbonoclastic bacteria.
[**in Marine enzymes for biocatalysis \(2013\) A. Trincone ed., pp. 373-402, Woodhead Publishing Limited, Cambridge \(UK\) ISBN 9781907568800**](#)
- P103) Izzo V., Tedesco, P., Notomista E., Pagnotta E., **Di Donato A.**, Trincone A., Tramice A.
alpha-Rhamnosidase activity in the marine isolate Novosphingobium sp. PP1Y and its use in the bioconversion of flavonoids.
[**J. Molecular Catalysis B:Enzymatic \(2014\) 105, 95-103**](#)
- P104) D'Argenio V., Notomista E., Petrillo M., Cantiello P., Cafaro V., Izzo V., Naso B., Cozzuto L., Durante L., Troncone L., Paolella G., Salvatore F., **Di Donato A.**
Complete sequencing of Novosphingobium sp. PP1Y reveals a biotechnologically meaningful metabolic pattern.
[**BMC Genomics \(2014\) 15, 384-397**](#)
- P105) Donadio G., Sarcinelli C., Pizzo E., Notomista E., Pezzella A., Di Cristo C., De Lise F., **Di Donato A.**, Izzo V.
The Toluene o-xylene monooxygenase enzymatic activity for the biosynthesis of novel aromatic antioxidants.
[**PLOS ONE \(2015\) 10, e0124427**](#)
- P106) Pane K., Durante L., Pizzo E., Varcamonti M., Zanfardino A., Sgambati V., Di Maro A., Carpentieri A., Izzo V., **Di Donato A.**, Cafaro V., Notomista E.

Rational design of a carrier protein for the production of recombinant toxic peptides in Escherichia coli.

PLOS ONE (2016) 11, e0146552.

- P107) Conti V., Izzo V., Corbi G., Russomanno G., Manzo V., De Lise F., **Di Donato A.**, Filippelli A.

Antioxidant Supplementation in the treatment of aging-associated diseases.

Frontiers in Pharmacology, section Experimental Pharmacology and Drug Discovery (2016) 7, art.24.

- P108) Pane K., Sgambati V., Zanfardino A., Smaldone G., Cafaro V., Angrisano T., Pedone E., Di Gaetano S., Capasso D., Haney E., Izzo V., Varcamonti M., Notomista E., Hancock R., **Di Donato A.**, Pizzo E.

A new cryptic cationic antimicrobial peptide (AMP) from human apolipoprotein E with anti-bacterial activity and immunomodulatory effects on human cells.

FEBS J. (2016) 283, 2115-2131

- P109) Donadio G., Di Martino R., Rosario Oliva R., Petraccone L., Del Vecchio P., Di Luccia B., Ricca E., Istituto R., **Di Donato A.**, Notomista E.

A new peptide-based fluorescent probe selective for zinc (II) and copper (II).

J. Mater. Chem. B, (2016) 4, 6979-6988.

DOI: 10.1039/C6TB00671J

- P110) De Lise F., Mensitieri F., Tarallo V., Ventimiglia N., Vinciguerra R., Tramice A., Marchetti R., Pizzo E., Notomista E., Cafaro V., Molinaro A., Birolo L., **Di Donato A.**, Izzo V.

RHA-P: isolation, expression and characterization of a bacterial α -L-rhamnosidase from Novosphingobium sp. PP1Y.

J. Molecular Catalysis B:Enzymatic (2016) 134, 136-147.

- P111) Pane K., Durante L., Crescenzi O., Cafaro V., Pizzo E., Varcamonti M., Zanfardino A., Izzo V., **Di Donato A.**, Notomista E.

Antimicrobial Potency of Cationic Antimicrobial Peptides can be Predicted from their Amino Acid Composition: Application to the Detection of "Cryptic" Antimicrobial Peptides.

J. Theor. Biol. (2017) 419, 254-265.

- P112) Bosso A., Pirone L., Gaglione R., Pane K., Del Gatto A., Zaccaro L., Di Gaetano S., Diana D., Fattorusso R., Pedone E., Cafaro V., Haagsman H., van Dijk A., Scheenstra M., Zanfardino A., Crescenzi O., Arciello A., Varcamonti M., Veldhuizen E., **Di Donato A.**, Notomista E., Pizzo E.

*A new cryptic host defense peptide identified in human 11-hydroxysteroid dehydrogenase 1 β -like: from *in silico* identification to experimental evidence*

Biochim. Biophys. Acta (2017) 1861, 2342-2353

- P113) Pane K., Cafaro V., Avitabile A., Torres M.D.T., Vollaro A., De Gregorio E., Catania M.R., Di Maro A., Bosso A., Gallo G., Zanfardino A., Varcamonti M., Pizzo E., **Di Donato A.**, Lu, T.K., De La Fuente-Nunez C., Notomista E.

Identification of Novel Cryptic Multifunctional Antimicrobial Peptides from the Human Stomach Enabled by a Computational-Experimental Platform.

[ACS Synthetic Biology \(2018\) 7, 2105-2115](#)

DOI: 10.1021/acssynbio.8b00084

- P114) Pane, K., Verrillo, M., Avitabile, A., Pizzo, E., Varcamonti, M., Zanfardino, A., Di Maro, A., Rega, C., Amoresano, A., Izzo, V., **Di Donato A.**, Cafaro, V., Notomista, E.

Chemical Cleavage of an Asp-Cys Sequence Allows Efficient Production of Recombinant Peptides with an N-Terminal Cysteine Residue

[Bioconjugate Chem. \(2018\) 29, 1373-1383](#)

DOI: 10.1021/acs.bioconjchem.8b00083

- P115) Pizzo E., Cafaro V., **Di Donato A.**, Notomista E.

Cryptic Antimicrobial Peptides: identification methods and current knowledge of their immunomodulatory properties

[Bioconjugate Chem. \(2018\) 29, 1373-1383](#)

DOI: 10.2174/1381612824666180327165012

- P116) Mensitieri F., De Lise F., Strazzulli A., Moracci M., Notomista E., Cafaro V., Bedini E., Sazinsky MH., Trifuoggi M., **Di Donato A.**, Izzo V.

Structural and functional insights into RHA-P, a bacterial GH106 alpha-L-rhamnosidase from Novosphingobium sp. PP1Y

[Archives of Biochemistry and Biophysics \(2018\) 648, 1-11](#)

- P117) Pizzo E., Pane K., Bosso A., Landi N., Ragucci S., Russo R., Gaglione R., Torres MD., de la Fuente-Nunez C., Arciello A., **Di Donato A.**, Notomista E., Di Maro A.

Novel bioactive peptides from PD-L1/2, a type 1 ribosome inactivating protein from Phytolacca dioica L. Evaluation of their antimicrobial properties and anti-biofilm activities

[Biochim. Biophys Acta-Biomembranes \(2018\) 1860, 1425-1435](#)

- P118) De Lise F., Mensitieri F., Rusciano G., Dal Piaz F., Forte G., Di Lorenzo F., Molinaro A., Zarrelli A., Romanucci V., Cafaro V., Sasso A., Filippelli A., **Di Donato A.**, Izzo V.

Novosphingobium sp. PP1Y as a novel source of outer membrane vesicles

[J. Microbiol. \(2019\) 57,](#)

DOI 10.1007/s12275-019-8483-2

- P119) **Di Donato A.** e Di Maro A.

Le RIP (proteine inattivanti i ribosomi): struttura e potenziali applicazioni biotecnologiche.

[Rend. Acc. Sci. Fis. Mat., Napoli \(2019\) 86, 61-75.](#)

DOI 10.32092/1018

PATENTS

D'Alessio G., **Di Donato A.**, Piccoli R.
Muteins of pancreatic ribonuclease and uses thereof
European Patent n. EP0668349 (1995)

Di Donato A., Marzocchella A., Olivieri G., Salatino P., Siani L.,
Viggiani A., Galli EA., Barbieri P.
*Processo e relativo impianto per il risanamento di reflui
contenenti sostanze fenoliche mediante Pseudomonas stutzeri
OX1 immobilizzato su supporto granulare in airlift*
Brevetto italiano n. RM2005A000648 (2006)

Di Donato A., Notomista E.
*Ceppo batterico per la degradazione di miscele di idrocarburi
aromatici mono e policiclici*
Brevetto italiano n. MI2008A1407 (2008)

Di Donato A., Notomista E.
*Bacterial strain for the degradation of mixture of mono- and poly-
cyclic aromatic hydrocarbons dissolved in oil phases*
Brevetto internazionale n. WO2010012418 (2010)

BOOKS

Cuzzocrea G., D'Alessio G., Libonati M., Ipata, PL., Rotilio G. con la collaborazione di **Alberto Di Donato** *CHIMICA BIOLOGICA (1984)*, **edizioni Monduzzi (Bologna)**.

CONGRESS COMMUNICATIONS

- C1) D'Alessio G., **Di Donato A.**, Malorni MC., Parente A.
Relationships Between Quaternary Structure and S-S Bridges in RNAase BS-1
Proceedings 9th International Congress of Biochemistry, p.107, Stockholm (1973).
- C2) D'Alessio G., **Di Donato A.**, Malorni MC., Parente A.
Struttura e Funzione della Ribonucleasi BS-1.
19° Congresso Nazionale SIB, Abstr. 4CP, Trieste (1973).
- C3) **Di Donato A.**, Piccoli R., D'Alessio G.
La RNAasi BS-1 come Enzima Soggetto a Controllo : una Ipotesi di Lavoro
20° Congresso Nazionale SIB, Riva del Garda, Abstr.78 (1974).
- C4) D'Alessio G., **Di Donato A.**, Piccoli R.
Anticooperative Binding of Cytidine-2'-Phosphate to Ribonuclease BS-1.
Proceedings 10th Meeting of the Federation of European Biochemical Societies, Abstr.637, Parigi, Francia (1975).
- C5) Piccoli R., **Di Donato A.**, D'Alessio G.
Reattività di-Metà-dei-Siti della Ribonucleasi BS-1.
Congresso Nazionale SIBS, Abstr.42, Catanzaro (1975).
- C6) **Di Donato A.**, Piccoli R., D'Alessio G.
Relazioni tra la Struttura Quaternaria della Ribonucleasi BS-1 e la Non Equivalenza Funzionale dei Siti Catalitici.
21° Congresso Nazionale SIB, Abstr.PB37, Napoli (1975).
- C7) **Di Donato A.**, Piccoli R., D'Alessio G.
Selective Deamidation of Bovine Seminal Ribonuclease and its Importance for Regulation of Enzyme Activity.
The Special FEBS Meeting on Enzymes, Dubrovnik (1979), Abstr.S1-82.
- C8) **Di Donato A.**, D'Alessio G.
Basi Molecolari dell' Eterogeneità della Ribonucleasi Seminale Bovina.
II Riunione Gruppo Struttura e Funzione delle Proteine SIB, p.18, Camerino (1979).
- C9) **Di Donato A.**, Piccoli R., D'Alessio G.
Deammidazione Selettiva della RNAasi BS-1 e suo Ruolo nella Regolazione dell'Attività dell' Enzima.
25° Congresso Nazionale SIB, Castelvecchio Pascoli, p.306 (1979).
- C10) D'Alessio G., **Di Donato A.**, Donadio S., Piccoli R., Pizzano R.
New Tools for Studying the Kinetics of Bovine Seminal RNAase.
Proceedings 13th FEBS Meeting, Abstr.C1-P69, Gerusalemme (1980).
- C11) Acharya AS., **Di Donato A.**, Manning JM.

- Binding of Glyoxylate to Hemoglobin and Subsequent Reductive Carboxymethylation.*
Proc. Meet. of the American Soc. of Biol. Chem., New Orleans, USA, p.325 (1982).
- C12) D'Alessio G., **Di Donato A.**, Parente A., Piccoli R., Tamburrini M., Vescia S.
Ribonucleasi Pancreatica e Seminale della Specie Bovina.
28° Congresso Nazionale SIB, p.67-70, Firenze (1982).
- C13) **Di Donato A.**, Ciardiello MA., Picone D., D'Alessio G.
Isolamento di Peptidi ad Attività Oppioido-Simile da Proteine Alimentari.
30° Congresso Nazionale SIB, p.107, Lacco Ameno (1984).
- C14) **Di Donato A.**
Il Concetto di Simulazione
1° Corso Teorico-Pratico "Il Computer come Strumento nella Ricerca Biochimica" Camerino, p.10-15 (1985).
- C15) Ciardiello MA., D'Alessio G., **Di Donato A.**, Faraonio R., Galletti P.
Selective Deamidation and Enzymatic Methylation in Ribonucleases.
Convegno "Proteine '86", Gargnano, p.45 (1986).
- C16) Ciardiello MA., D'Alessio G., **Di Donato A.**, Galletti P., Ingrosso D.
Enzymatic Conversion of Isopeptide Bonds to Normal Peptide Bonds in Seminal Ribonuclease.
1st Int. Symp. on Post-Translational Modifications of Proteins and Ageing, Abstr.P50, Ischia (1987).
- C17) Capasso S., D'Alessio G., **Di Donato A.**, Di Lorenzo G., Mattia CA., Mazzarella L., Piccoli R., Tamburrini M.
Dimeric Organization and Functional Properties of Seminal Ribonuclease: their Relationships with the Structure and Function of Pancreatic RNase.
Relazione al Convegno "Proteine '87", p.37-39, Firenze (1987).
- C18) Fanti WJ., Manning LR., **Di Donato A.**, Ueno H., Manning JM., Rogers PH., Arnone A.
Specifically Carboxymethylated Hemoglobin A: Comparative Studies with Carbamino Hemoglobin and Cross-Linking with Glycolaldehyde.
Proc. Meet. of the American Soc. of Biol. Chem., p.530, Philadelphia, USA (1987).
- C19) Merola M., Ueno H., Soper TS., Recsei P., **Di Donato A.**, Manning JM.
Studies on Enzyme-Activated Inhibitors of Bacterial D-Amino Acid Transaminase.
Proc. Symp. of The Protein Society, Abstr.113, San Diego, USA (1987).
- C20) Manning JM., Ueno H., Soper T.S., Recsei P., **Di Donato A.**, Merola M.

Studies on Enzyme-Activated Inhibitors of Bacterial D-Amino Acid Transaminase.

Proc. Meet. on Vitamin B6, Abstr.D8, Turku, Finland (1987).

- C21) Barone G., Castronuovo G., Del Vecchio P., **Di Donato A.**, Elia V. *Thermal Stability of Ribonuclease A and BS Studied by Differential Scanning Microcalorimetry*
Convegno "Proteine '88", p.161, Napoli (1988).
- C22) **Di Donato A.**, Petrilli P.
Gene Design al calcolatore
34° Congresso Nazionale SIB, p.211, Padova (1988).
- C23) D'Alessio G., **Di Donato A.**, Parente A., Piccoli R., Ciardiello MA., de Nigris M., Grumetto L., Russo A., Verde C.
Strategies for Protein Engineering of Ribonucleases with Farmacological Potentials.
Symposium on Biochemistry for Biotechnology, Abstr.L21/1-L21/5, Como (1989).
- C24) D'Alessio G., **Di Donato A.**, Parente A., Piccoli R., Ciardiello MA., de Nigris M., Grumetto L., Mastronicola MR., Russo N., Verde C.
Seminal RNAase and Other RISBASES.
2nd International Meeting on Structure, Mechanism and Function of Ribonucleases, p.25, S. Feliu de Guixols, Spain (1990).
- C25) **Di Donato A.**, Ciardiello MA., Piccoli R., D'Alessio G.
Seminal Ribonuclease: a Molecular Approach to the Ageing of Proteins.
2nd International Meeting on Structure, Mechanism and Function of Ribonucleases, S. Feliu de Guixols, p.26, Spain (1990).
- C26) **Di Donato A.**, Ciardiello MA., Piccoli R., D'Alessio G.
Deamidation and Ageing of Seminal Ribonuclease.
7th Symposium on Macromolecules in the Functioning Cell, p.36, Taormina (1990).
- C27) D'Alessio G., **Di Donato A.**, Parente A., Piccoli R., Ciardiello MA., de Nigris M., Grumetto L., Mastronicola MR., Russo N., Verde C.
RNAases and RISBASES.
35° Congresso Nazionale SIB, p.45, Bari (1990).
- C28) D'Alessio G., **Di Donato A.**, Parente A., Piccoli A., Cafaro V., Ciardiello MA., de Nigris M., Mastronicola MR., Melk D., Russo N.
Produzione di Ribonucleasi con Potenzialità Terapeutiche Mediante Ingegneria Proteica.
Convegno del Progetto Finalizzato C.N.R. "Biotecnologie e Biostrumentazione", p.26, Genova (1991).
- C29) Russo N., de Nigris M., **Di Donato A.**, D'Alessio G.
Production of Recombinant RNAases of Pharmaceutical Interest.
VII Convegno Nazionale "Proteine '92", p.46, Pavia (1992).

- C30) **Di Donato A.**, Cafaro V., Ciardiello MA., de Nigris M., Russo N., D'Alessio G.
Expression of RNAases with Pharmacological Potential in Prokaryotic and Eukaryotic Systems.
IV Simposio "Biotecnologie Biochimiche", p.21-22, Capri (1992).
- C31) **Di Donato A.**, Cafaro V., Ciardiello MA., de Nigris M., Russo N., D'Alessio G.
Protein Engineering of RNases of Biological Interest
Joint Greek-Italian Meeting on Chemistry of Biological Systems and Molecular Chemical Engineering, p.13-14, Cetraro (1992).
- C32) Cafaro V., D'Alessio G., **Di Donato A.**, de Nigris M., Piccoli R., Russo N.
Production of Recombinant Seminal Ribonuclease
3rd International Meeting on Chemistry, Biology and Biotechnology of Ribonucleases, Abstr.P10, Capri, Italy (1993).
- C33) Russo N., de Nigris M., Grimaldi D., **Di Donato A.**
PCR mediated synthesis and expression of cDNA coding for Human Liver Ribonuclease
3rd International Meeting on Chemistry, Biology and Biotechnology of Ribonucleases, Abstr.P20, Capri, Italy (1993).
- C34) **Di Donato A.**, Cafaro V., Rizzo M. , D'Alessio G.
The structural Determinants of Bovine Seminal Ribonuclease Dimeric Structure
3rd International Meeting on Chemistry, Biology and Biotechnology of Ribonucleases, Abstr.P21, Capri, Italy (1993).
- C35) D'Alessio G., **Di Donato A.** , Piccoli R.
Bovine seminal ribonuclease, a problem protein.
Lecture at 3rd International Meeting on Chemistry, Biology and Biotechnology of Ribonucleases, Abstr.L14, Capri, Italy (1993).
- C36) **Di Donato A.**, Cafaro V., de Nigris M., Minopoli G., Rizzo M., D'Alessio G.
Engineering of Ribonucleases.
Convegno Nazionale "Proteine '93", p.36, Parma (1993).
- C37) D'Alessio G., **Di Donato A.**, Piccoli R.
L'ingegneria proteica applicata ad enzimi con proprietà biologiche di interesse biotecnologico: il caso delle ribonucleasi.
II Convegno Nazionale della Divisione di Chimica dei Sistemi Biologici della Società Chimica Italiana, p.95, Roma (1993).

- C38) Piccoli R., Adinolfi B., Bracale A., Cafaro V., De Lorenzo C., Mastronicola MR., Melck D., Rizzo M., Russo N., **Di Donato A.**, D'Alessio G.
Bovine Seminal RNase: an atypical member of the ribonuclease superfamily.
Convegno Nazionale "Proteine '94", p.3, Verona (1994).
- C39) **Di Donato A.**, Cafaro V., Romeo I., D'Alessio G.
Key amino acid residues, and their roles, in the evolutionary design of a dimeric RNase with special bioactions.
First European Symposium of The Protein Society, Davos, CH (1995), Protein Science Vol.4 Suppl.1, p.80.
- C40) Cafaro V., **Di Donato A.**, Pasquo A., Politi L., Scandurra R.
Synthesis and expression of the cDNA coding for glutamate dehydrogenase from Sulfolobus solfataricus
First European Symposium of The Protein Society, Davos, CH (1995), Protein Science Vol.4 Suppl.1, p.91.
- C41) Pasquo A., Politi L., Chiaraluce R., Consalvi V., Millevoi S., Scandurra R., Cafaro V., **Di Donato A.**
Synthesis and expression of the cDNA coding for glutamate dehydrogenase from Sulfolobus solfataricus
3rd Meeting on Biohecnology of Extremophiles, p.45, Sevilla, Spain (1995).
- C42) **Di Donato A.**, Cafaro V., Notomista E., Romeo I., D'Alessio G.
Molecular determinants of the antitumor activity of a ribonuclease
Workshop on Chemistry and Physics of Proteins and Nucleic Acids, Acquafredda di Maratea, p.23 (1995).
- C43) Notomista E., Pirozzi M., Cafaro V., D'Alessio G., **Di Donato A.**
Investigating site-site interaction of BS-RNase by protein engineering
Convegno Nazionale "Proteine '96", p.35, Siena (1996).
- C44) D'Alessio G., **Di Donato A.**, Piccoli R.
From monomeric to dimeric RNases with special bioactions, from evolution to test tube
Lecture at 4th International Meeting on Ribonucleases: Chemistry, Biology and Biotechnology, Abstr.S5L3, Groningen, The Netherlands (1996).
- C45) Ammendola S., Politi L., Cafaro V., Pasquo A., Consalvi V., Chiaraluce R., di Giamberardino P., **Di Donato A.**, Scandurra R.
Synthesis and expression of the gene coding for S. solfataricus glutamate dehydrogenase in E. coli
41° Congresso Nazionale SIB, p.273, Catania (1996).
- C46) Barone G., Cafaro V., Catanzano F., D'Alessio G., **Di Donato A.**, Graziano G.
Thermal stability of some mutants of RNase a: Relation with the subunits of BS-RNase
New Trends in Biotechnology: Science and Education, p.22, Capri (1996).

- C47) Catanzano F., Graziano G., Cafaro V., **Di Donato A.**, Barone G.
From RNase A toward BS-RNase: thermodynamic consequences of introducing into RNase A the minimal structural requirements for dimerization and swapping
Convegno Nazionale "Proteine '97", p.72, Ferrara (1997).
- C48) Cafaro V., Bracale A., **Di Donato A.**, D'Alessio G.
A new mutein of RNase A with enhanced antitumor action
Convegno Nazionale "Proteine '97", p.132, Ferrara (1997).
- C49) Cafaro V., Bracale A., **Di Donato A.**, D'Alessio G.
Un nuovo mutante della RNasi A dotato di attività antitumore
Convegno delle Sezioni Campania, Puglia, Calabria, Molise, Basilicata della SIB, p.15, Avellino (1997).
- C50) Scognamiglio R., Cafaro V., Del Vecchio Blanco F., Siniscalco Gigliano G., Mastronicola MR., Parente A., **Di Donato A.**
A recombinant ribosome-inactivating protein from the plant Phytolacca dioica produced from a synthetic gene
Convegno delle Sezioni Campania, Puglia, Calabria, Molise, Basilicata e Sicilia della SIB, p.20, Catania (1998).
- C51) Scognamiglio R., Cafaro V., Del Vecchio Blanco F., Siniscalco Gigliano G., Mastronicola MR., Parente A., **Di Donato A.**
Towards the construction of a transgenic plant: cloning and expression of a Ribosome-Inactivating Protein produced from a synthetic gene
43° Congresso Nazionale SIB, p.256, Bari (1998).
- C52) D'Alessio G., **Di Donato A.**, Piccoli R., Russo N., Cafaro V., De Lorenzo C., Bracale A., Di Gaetano S.
The molecular basis for the production of an antitumor protein
43° Congresso Nazionale SIB, p.117, Bari (1998).
- C53) Cafaro V., Bracale A., Formiggini F., Notomista E., D'Alessio G., **Di Donato A.**
Protein engineering of ribonucleases
Franco-Hispano-Italian Meeting of Biochemistry and Molecular Biology, p.75, Marseilles, France (1998).
- C54) **Di Donato A.**, Piccoli R., D'Alessio G.
Protein engineering for biotechnology: grafting functional determinants of ribonucleases
INPEC 99. International Network of Protein Engineering Centers Annual Meeting, p.23, Versailles, France (1999).
- C55) Piccoli R., Bracale A., Cafaro V., Castaldi F., De Lorenzo C., Di Gaetano S., Scognamiglio R., Monaco C., Spalletti Cernia D., Russo A., Laccetti P., **Di Donato A.**, Vecchio G., D'Alessio G.
Antitumor pancreatic-type RNases
Lecture at 5th International Meeting on Ribonucleases, p.17, Warrenton, Va-USA (1999).
- C56) Notomista E., Fusiello R., Barbieri P., **Di Donato A.**
Expression and partial purification of the complex of toluene/o-xylene monooxygenase (Tomo) from Pseudomonas stutzeri OX1

Convegno Nazionale "Proteine '99", p.69, Roma (1999).

- C57) Scognamiglio R., Notomista E., Barbieri P., Pucci P., Dal Piaz F., **Di Donato A.**

Purification and characterization of the subunits B and D of the complex of toluene/o-xylene monooxygenase (Tomo) from Pseudomonas stutzeri OX1

Convegno Nazionale "Proteine '99", p.78, Roma (1999).

- C58) Scognamiglio R., Barbieri P., Pucci P., Dal Piaz F., **Di Donato A.**
Toluene/o-xylene monooxygenase OX1: partial proteolysis studies.

Third European Symposium of The Protein Society, p.84, Garmisch-Partenkirchen, Germany (1999).

- C59) Cafaro V., Scognamiglio R., Fusillo R., Barbieri P., Pucci P., Dal Piaz F., **Di Donato A.**

Purification and characterization of the recombinant subunits of the complex of toluene/o-xylene monooxygenase (Tomo) from Pseudomonas stutzeri OX1

44° Congresso Nazionale SIB, p.151, Alghero (1999).

- C60) El-Joubary A., Bruix M., Santoro J., Kovér KE., Batta Gy., Szilagy L., **Di Donato A.**, Cafaro V., D'Alessio G., Rico M.

Solution structure and dynamics of human pancreatic ribonuclease

IV ESR Conference on NMR in Molecular Biology, p.143, Granada, Spain (1999).

- C61) El-Joubary A., Santoro J., Bruix M., Cafaro V., **Di Donato A.**, D'Alessio G., Rico M.

Solution structure of the human pancreatic ribonuclease

5th International Meeting on Ribonucleases, p.31, Warrenton, Va-USA (1999).

- C62) Notomista E., Catanzano F., Graziano G., Barone G., D'Alessio G., **Di Donato A.**

Onconase: an unusually stable mesophilic protein

Convegno Nazionale "Proteine 2000", p.66, Varese (2000).

- C63) Scognamiglio R., Cafaro V., Passaro I., Viggiani A., Barbieri P., Trifoggi M., Pucci P., Dal Piaz F., **Di Donato A.**

Purification and characterization of the recombinant sub-complex H and of subunit C of the complex of toluene/o-xylene-monooxygenase (Tomo) from P. stutzeri OX1

Convegno Nazionale "Proteine 2000", Abstr.B09, Varese (2000).

- C64) Scognamiglio R., Passaro I., Pucci P., Dal Piaz F., **Di Donato A.**

Il complesso della toluene/o-xylene-monoossigenasi (Tomo) da P. stutzeri OX1

Convegno delle Sezioni Campania, Puglia, Calabria, Molise, Basilicata della SIB, p.23, Caserta (2000).

- C65) Spadaccini R., Crescenzi O., Tancredi T., De Casamassimi N., Saviano G., Scognamiglio R., **Di Donato A.**, Temussi PA.

Solution structure of a sweet protein: NMR study of MNEI, a single chain monellin

45° Congresso Nazionale SIB, p.331, Napoli (2000).

- C66) Notomista E., Catanzano F., Graziano G., Barone G., D'Alessio G., **Di Donato A.**
Functional consequences of the stability of Onconase
45° Congresso Nazionale SIB, p.289, Napoli (2000).
- C67) Scognamiglio R., Passaro I., Pucci P., Dal Piaz F., **Di Donato A.**
*The complex of toluene/o-xylene monooxygenase from *P. stutzeri* OX1: sub-complex H and subunit D*
45° Congresso Nazionale SIB, p.78, Napoli (2000).
- C68) Cafaro V., Viggiani A., Izzo V., Pucci P., Dal Piaz F., **Di Donato A.**
*The complex of toluene/o-xylene monooxygenase from *P. stutzeri* OX1: subunits C and F*
45° Congresso Nazionale SIB, p.77, Napoli (2000).
- C69) Scognamiglio R., Troise F., Notomista E., **Di Donato A.**
Toluene o-xilene monoossigenasi e Fenolo ossidrilasi: un caso di ridondanza evolutiva?
Convegno delle Sezioni Campania, Puglia, Calabria, Molise, Basilicata della SIB, p.25, Salerno (2001).
- C70) Scognamiglio R., Izzo V., **Di Donato A.**
*The Phenol hydroxylase from *P. stutzeri* OX1*
Convegno Nazionale "Proteine 2002", p.59, L'Aquila (2002).
- C71) Viggiani A., Siani L., **Di Donato A.**
*Sequencing, expression, purification and characterization of catechol 2,3-dioxygenase from *Pseudomonas stutzeri* OX1*
Convegno Nazionale "Proteine 2002", p.60, L'Aquila (2002).
- C72) Notomista E., Catanzano F., Graziano G., Di Gaetano S., Barone G., **Di Donato A.**
Relationships between stability and biological activity of onconase an antitumor ribonuclease
47° Congresso Nazionale SIB, p.297, Palermo (2002).
- C73) Scognamiglio R., Izzo V., Alfieri F., Carpentieri A., Gomez d'Ayala G., Smith O., **Di Donato A.**
*Reconstituted recombinant Phenol hydroxylase from *P. stutzeri* OX1*
47° Congresso Nazionale SIB, p.298, Palermo (2002).
- C74) Viggiani A., Siani L., **Di Donato A.**
*An extradiol ring cleavage dioxygenase from *Pseudomonas stutzeri* OX1 meta pathway: its sequencing, expression, purification and characterization*
47° Congresso Nazionale SIB, p.299, Palermo (2002).
- C75) Notomista E., Cafaro V., Izzo V., Scognamiglio R., **Di Donato A.**
*Multicomponent Monooxygenases from *Pseudomonas stutzeri**
Fifth European Symposium of The Protein Society, Florence (2003)
Protein Science 12, Suppl.1, p.134, Abstr.283, (2003).

- C76) Viggiani A., Siani L., Notomista E., Birolo L., Pucci P., **Di Donato A.**
Characterization of Recombinant Catechol 2,3-Dioxygenase from Pseudomonas stutzeri OX1
Fifth European Symposium of The Protein Society, Florence (2003)
Protein Science 12, Suppl.1, p.134, Abstr.285, (2003).
- C77) Ambundo E., Bautista J., Beauvais L., **Di Donato A.**, Friesner R., Gherman BF., George SJ., Muthusamy M., Sazinsky MH., Thorneley RNF.
Structural and mechanistic studies of soluble alkane and arene monooxygenases with carboxylate-bridged diiron center
Taiwan Bio-Inorganic Symposium 2003, p.97 (2003).
- C78) Viggiani A., Siani L., Notomista E., **Di Donato A.**
Recombinant Catechol 2,3-dioxygenase from Pseudomonas stutzeri OX1 and its anomalous pH dependence
Second European Bioremediation Conference, p.457-460. Chania (Crete), Greece, (2003).
- C79) Cafaro V., Alfieri F., Capasso P., Izzo V., Notomista E., Scognamiglio R., Siani L., Viggiani A., **Di Donato A.**
Mono- and dioxygenases from P. stutzeri OX1 and from the hyperthermophile S. solfataricus
Italy-Japan Symposium "New Trends in Enzyme Science and Technology", p.10, Naples (2003).
- C80) Cafaro V., Scognamiglio R., Izzo V., Capasso P., Notomista E., **Di Donato A.**
Metabolic engineering using recombinant proteins
Convegno Nazionale "Proteine 2004", Abstr.R12, Viterbo (2004).
- C81) Cafaro V., Scognamiglio R., Izzo V., Capasso P., Alfieri F., **Di Donato A.**
Molecular mechanisms of adaptation to xenobiotic compounds in Pseudomonas stutzeri OX1
Oxyzimes 2004, p.6, Naples (2004).
- C82) Viggiani A., Siani L., Pavone L., Picardi A., Notomista E., **Di Donato A.**
The role of conserved H246 and H199 in the catalysis of catechol 2,3-dioxygenase from Pseudomonas stutzeri OX1.
Oxyzimes 2004, p.19, Naples (2004).
- C83) Siani L., Madonna S., **Di Donato A.**, Sannia G.
Recombinant expression of Toluene o-Xilene monooxygenase (ToMO) in Pseudoalteromonas Haloplancis TAC 125, a psychrotrophic bacterium
Oxyzimes 2004, p.37, Naples (2004).
- C84) Viggiani A., **Di Donato A.**, Marzocchella A., Salatino P.
Biodegradation of Phenol by means of Pseudomonas stutzeri OX1
Congresso G.R.I.C.U., p.333-336, Ischia (2004).
- C85) Lodato A., Alfieri F., **Di Donato A.**, Marzocchella A., Salatino P.

- Kinetics of organic dyes conversion by means of Pseudomonas stutzeri OX1*
Congresso G.R.I.C.U., p.325-328, Ischia (2004).
- C86) Merlino A., Di Fiore A., Carannante A., Notomista E., **Di Donato A.**, Mazzarella L., Sica F.
X-ray structures and molecular dynamics simulations of two mutants of onconase, a cancer chemotherapeutic.
CSB Summer School 'Understanding Protein Stability Karolinska Institutet, Center for Structural Biochemistry, p.87, CSB and Summer University of Southern Stockholm. Huddinge, Svezia (2004).
- C87) Lippard SJ., Ambundo EA., Bautista J., Beauvais LG., **Di Donato A.**, Friesner RA., Gherman BF., George SJ., Muthusamy M., Sazinsky MH., Thorneley RNF.
Structural and mechanistic studies of soluble multicomponent monooxygenases with carboxylate-bridged diiron centers
Abstracts of papers of the American Chemical Society. Vol 227, p. U1442. Anaheim, CA, USA, 2004.
- C88) Sazinsky MH., Bard J., **Di Donato A.**, Lippard SJ.
Structure of the Toluene/o-Xylene Monooxygenase Hydroxylase from Pseudomonas stutzeri OX1
Abstracts of papers of the American Chemical Society. Vol 227, p. U1450. Anaheim, CA, USA, 2004.
- C89) Merlino A., Mazzarella L., Di Fiore A., Carannante A., Notomista E., **Di Donato A.**, Sica F.
Structural and dynamic studies on Onconase mutants
Acta Crystallographica. Section A, Foundation of Crystallography (2005) 61, C185-C186.
XX IUCr Congress, Florence, Italy, August 2005.
- C90) Alfieri F., **Di Donato A.**, Marzocchella A., Salatino P.
An assessment of an airlift biofilm reactor
The seventh Italian Conference on Chemical and process Engineering, p.43-48, Giardini di Naxos (2005).
- C91) Merlino A., Sica F., Mazzarella L., Carannante A., Di Fiore A., **Di Donato A.**, Notomista E.
Crystal structures and molecular dynamic studies of Onconase mutants
7th International meeting on ribonucleases, p.12, Stara Lesna, Slovak Republic (2005).
- C92) De Lorenzo C., Di Gaetano S., Notomista E., Arciello A., Mont, D., Cozzolino R., Laccetti P., Piccoli R., **Di Donato A.**, D'Alessio. G.
Human Antitumor RNases and ImmunoRNases.
7th International meeting on ribonucleases, p.33, Stara Lesna, Slovak Republic (2005).
- C93) Siani L., Viggiani A., Notomista E., **Di Donato A.**
Ingegneria proteica della Catecolo 2,3-diossigenasi da Pseudomonas stutzeri OX1
Giornate Scientifiche Interpolo, p.95, Napoli (2005).
- C94) Capasso P., Cafaro V., Notomista E., **Di Donato A.**

Pathway metabolici per la degradazione di composti aromatici in Pseudomonas stutzeri OX1
Giornate Scientifiche Interpolo, p.99, Napoli (2005).

- C95) Siani L., Papa R., **Di Donato A.**, Sannia G.
Recombinant expression of Toluene o-Xylene Monooxygenase (ToMO) from Pseudomonas stutzeri OX1 in a marine Antarctic bacterium: Pseudoalteromonas haloplanktis TAC 125
3rd European Bioremediation Conference (2005), Edited by Nicolas Kalogerakis, Andrew G. Livingston, Dionissios Mantzavinos, p.116-120.
- C96) Cafaro V., Notomista E., Scognamiglio R., Alfieri F., Bozza G., Pennacchio F., **Di Donato A.**
Metabolic Engineering for bioremediation strategies
Japan-Italy Symposium on New Trends in Enzyme Science and Technology, p.27-28, Nagoya, Japan (2006).
- C97) Olivieri G., Russo ME., **Di Donato A.**, Marzocchella A., Salatino P.
Assessment of the Kinetics of Phenol Bioconversion by Pseudomonas sp. OX1
Industrial Biotechnology International Conference, p.44, Naples (2007).
- C98) Merlino A., Mazzarella L., Di Fiore A., Carannante A., Notomista E., **Di Donato A.**, Sica F..
The importance of dynamic effects on the enzyme activity: X-ray structure and molecular dynamics of onconase.
Meeting FIRB 2008. Metodologie e Tecnologie innovative per la Farmaceutica, p.44, Lecce (2008).
- C99) **Di Donato A.**, Cafaro V., Izzo V., Notomista E., Scognamiglio R., Alfieri F., Bozza G., Pennacchio F.
Metabolic Engineering: a tool for bioremediation strategies
53° Congresso Nazionale SIB, Abstr.R21, Riccione (2008).
- C100) Russo ME., **Di Donato A.**, Marzocchella A., Salatino P.
Formation and growth of bacterial biofilm in three phase reactors.
Congresso G.R.I.C.U. 2008, p.311-316, Le Castelle (Kr) (2008).
- C101) Olivieri G., **Di Donato A.**, Lodato A., Marzocchella A., Salatino P.
Azo-dye conversion process by means of Pseudomonas sp. OX1 biofilm
BIOFILMSIII Conference, p.55, Munich, Germany (2008).
- C102) Cafaro V., Notomista E., Izzo V., Scognamiglio R., Alfieri F., Pennacchio F., **Di Donato A.**
Molecular and "conventional" approaches to bioremediation strategies
Japan-Italy Symposium on New Trends in Enzyme Science and Technology, p.9-10, Naples (2009).
- C103) Notomista E., Cafaro V., Izzo V., Troncone L., Smaldone, G., D'Urso, N., Garzillo, F., Varcamonti, M., **Di Donato A.**

Adaptation of Novosphinobium ap. PP1Y to grow on complex mixture of aromatic compounds dissolved in oil phases
III International Conference on Environmental, Industrial and Applied Microbiology, p.660, Lisbon, Portugal (2009).

- C104) Izzo V., Notomista E., Scognamiglio R., Pezzella, A., D'Auria, M., Donadio G., **Di Donato A.**
The catalytic potential of bacterial multicomponent monooxygenase ToMO and PH for the synthesis of antioxidants tyrosol and hydroxytyrosol
III International Conference on Environmental, Industrial and Applied Microbiology, p.812, Lisbon, Portugal (2009).
- C105) Cafaro V., Notomista E., Izzo V., Scognamiglio R., Troncone L., **Di Donato A.**
Molecular dissection of aromatic hydrocarbons biodegradation
[**The 4th Korea-Italy S&T Forum, p.13, Naples, Italy \(2010\).**](#)
- C106) D'Argenio V., Cantiello P., Naso B., Petrillo M., Cozzuto L., Notomista E., Paolella G., **Di Donato A.**, Salvatore F.
De novo sequencing and assembly of the whole genome of Novosphingobium Puteolanum PP1Y: a putative biotechnology engine.
[**42° Congresso Nazionale della SIBIOC, p.428, Roma \(2010\).**](#)
- C107) Cafaro V., Notomista E., Izzo V., Troncone L., Donadio G., Tedesco P., **Di Donato A.**
Bioaugmentation of Novosphingobium sp. PP1Y in natural and artificial soils contaminated by PAHs and heavy metals.
[**Environmental Microbiology and Biotechnology in the frame of the Knowledge-Based Bio and Green Economy, p.S9, Bologna \(Italy\), April 10-12, 2012.**](#)
- C108) Donadio G., Notomista E., Serpico A., Pezzella A., **Di Donato A.**, Izzo V.
Bacterial multicomponent Monooxygenases for the biosynthesis of antioxidants of industrial interest.
[**Environmental Microbiology and Biotechnology in the frame of the Knowledge-Based Bio and Green Economy, p.S163, Bologna \(Italy\), April 10-12, 2012.**](#)
- C109) Izzo V., Notomista E., Pezzella A., Donadio G., **Di Donato A.**
Rational site-directed mutagenesis: a computational approach for the design of mutants of the toluene o-xylene monooxygenase
Congresso Nazionale CNBXI, p.23. Varese, June 27-29, 2012.
- C110) Izzo V., Russomanno G., Notomista E., Pizzo E., Conti V., Donadio G., Di Cristo C., Pezzella A., Di Donato A., Filippelli A.**
Novel antioxidant catechols: biosynthesis, characterization and biological activity.
[**XXXVI National Congress of the Italian Society of Pharmacology, Torino, October 23-26, 2013.**](#)
- C111) Tramice A., Izzo V., Finore I., Notomista E., Pagnotta E., **Di Donato A.**, Trincone A.

a-Rhamnosidase activity in the marine isolate Novosphingobium sp. PP1Y and its use in the bioconversion of flavonoids
10th European Symposium on Biochemical Engineering Sciences and 6th International Forum on Industrial Bioprocesses
in collaboration with ACS. Lille (FR), September 7-10, 2014.

- C112) **Di Donato A.**, De Lise F., Mensitieri F., Donadio G., Tramice A., Trincone A., Cafaro V., Notomista E., Izzo V.
From Bioremediation to Biocatalysis: biotechnologically relevant enzymes from microorganisms adapted to polluted environments
Japan-Italy Symposium on New Trends in Science and Engineering of Enzyme and Microbiology for Sustainable Society, Lecture T3, Nara, Japan (2014).
- C113) Manzo V., Donadio G., Notomista E., Russomanno G., Sarcinelli C., De Lise F., Mensitieri F., Ventimiglia N., Di Cristo C., Pizzo E., Pezzella A., **Di Donato A.**, Izzo V.
Microbial Oxygenase Activities for the Biosynthesis of Novel Aromatic Antioxidant Compounds.
Giornate della Facoltà di Farmacia e Medicina a Salerno. 22-23 maggio 2014, Università degli Studi di Salerno. Translational Medicine @ UniSa (2014) - ISSN 2239-9747 2014, Special Issue (1): 9
- C114) Pane K., Cafaro V., Avitabile A., Sgambati V., Bosso A., Pizzo E., Notomista E., **Di Donato A.**
Development of new carrier protein for AMPs production
5th International Meeting on Anti-microbial Peptides, P12, p.12, London (UK) September 7-8, 2015
- C115) Avitabile A., Cafaro V., Pane K., Bosso A., Sgambati V., Pizzo E., Notomista E., **Di Donato A.**
The activation peptide of human pepsinogen is an antimicrobial peptide
5th International Meeting on Anti-microbial Peptides, P24, p.15, London (UK) September 7-8, 2015
- C116) Verrillo MV., PANE K., PIZZO E., VARCAMONTI M., ZANFARDINO A., SIEPI ML., AVITABILE A., **DI DONATO A.**, CAFARO V., NOTOMISTA E.
EFFICIENT PRODUCTION AND LABELING OF RECOMBINANT PEPTIDES ENDOWED WITH A N-TERMINAL CYSTEINE RESIDUE
Convegno Nazionale "Proteine 2016", Abstr.XXX, Bologna (2016).
- C117) De Lise F., Mensitieri F., Castaldi S., Rusciano G., Dal Piaz F., Sasso A., Zarrelli A., **Di Donato A.**, Izzo V.
Purification and characterization of extracellular nanostructures from N.sp. PP1Y: a novel example of Outer Membrane Vesicles
59^o Congresso Nazionale SIB, Caserta (2017).
- C118) Mensitieri F., De Lise F., Cafaro V., Lumacone M., Strazzulli A., Notomista E., Moracci M., **Di Donato A.**, Izzo V.
RHA-P: a novel bacterial a-L-rhamnosidase of biotechnological relevance from Novosphingobium sp. PP1Y
59^o Congresso Nazionale SIB, Caserta (2017).

- C119) Notomista E., Bosso A., Pane K., Zanfardino A., Varcamonti M., Pedone E., Arciello A., Veldhuizen E., de la Fuente-Núñez C., Catania MR., Cafaro V., **Di Donato A.**, Pizzo E.
Human Cryptic Host Defence Peptides: identification and analysis of their antimicrobial, anti-biofilm and immunomodulatory properties
59° Congresso Nazionale SIB, Caserta (2017).
- C120) Pane K., Cafaro V., Avitabile A., De Gregorio E., Vollaro A., Catania MR., Crescenzi O., Arciello A., Di Maro A., Zanfardino A., Varcamonti M., Contursi P., **Di Donato A.**, Pizzo E., Notomista E.
Cryptic antimicrobial peptides, a still unexploited source of bioactive peptides
59° Congresso Nazionale SIB, Caserta (2017).
- C121) De Lise F., Mensitieri F., Strazzulli A., Moracci M., Notomista E., Cafaro V., **Di Donato A.**, Izzo V.
Structural and functional insight into a novel bacterial α -L-rhamnosidase from Novosphingobium sp. PP1Y.
2° Workshop BIO/10, Napoli 17 maggio 2019.
- C122) De Lise F., Mensitieri F., Strazzulli A., Moracci M., Notomista E., Cafaro V., Sazinsky MH., **Di Donato A.**, Izzo V.
RHA-P: Structural and functional insight into a novel bacterial α -L-rhamnosidase from Novosphingobium sp. PP1Y.
CBM13 - Carbohydrate Bioengineering Meeting, Toulouse (Fr) (2019)