



Europass Curriculum Vitae

Personal information

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Nationality Italian

Occupational field **Professor (Associate)** (SSD: FIS/07) Department of Molecular Medicine
Faculty of Pharmacy and Medicine, University of Rome 'La Sapienza'

Work experience

Dates 2006-2007
Occupation or position held Temporary Research Associate
Main activities and responsibilities Research and teaching
Name and address of employer Department of Chemistry, University of Rome 'La Sapienza'
Sector CHIM/02

Dates 2003-2006
Occupation or position held Temporary Research Associate
Main activities and responsibilities Research and teaching
Name and address of employer Department of Physics, University of Rome 'La Sapienza'
Sector CHIM/02

Education and training

Dates 2000-2003
Title of qualification awarded PhD
Name and type of organisation providing education and training University of Rome 'La Sapienza'

Dates 1993-1999
Title of qualification awarded Master's Degree in Physics
Name and type of organisation providing education and training University of Rome 'La Sapienza'

Personal skills and competences

Mother tongue(s) **Italian**

Other language(s)

Self-assessment

European level ()*

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient User	C2	Proficient User	B2	Independent User	C1	Proficient User	C2	Proficient User

(*) [Common European Framework of Reference for Languages](http://www.cedefop.europa.eu/en/etools/cefr)

Annexes

Scientific Publication

- 1 Caputo D., Papi M., Coppola R., Palchetti S., Digiaco L., Caracciolo G., Pozzi D. Manipulation of lipoplex concentration at the cell surface boosts transfection efficiency in hard-to-transfect cells.
Nanoscale. 2017; 7: 13958-13966. I.F.: 7.76
- 2 Palchetti S., Pozzi D., Marchini C., Amici A., Andreani C., Bartolacci C., Digiaco L., Gambini V., Cardarelli F., Di Rienzo C., Peruzzi G., Amenitsch H., Palermo R., Screpanti I., Caracciolo G. Manipulation of lipoplex concentration at the cell surface boosts transfection efficiency in hard-to-transfect cells.
Nanomedicine: Nanotechnology, Biology and Medicine. 2017; 13: 681–691. I.F.: 5.671
- 3 Caracciolo G., Farokhzad O.C., Mahmoudi M. Biological Identity of Nanoparticles In Vivo: Clinical Implications of the Protein Corona.
Trends in Biotechnology. 2017; 35: 257-264. I.F.: 12.065
- 4 Palchetti S., Digiaco L., Pozzi D., Peruzzi G., Micarelli E., Mahmoudi M., Caracciolo G. Nanoparticles-cell association predicted by protein corona fingerprints.
Nanoscale. 2016; 8: 12755-12763. I.F.: 7.76
- 5 Palchetti S., Pozzi D., Mahmoudi M., Caracciolo G. Exploitation of nanoparticle–protein corona for emerging therapeutic and diagnostic applications.
Journal of Material Chemistry B. 2016; 4: 4376-4381. I.F.: 4.872
- 6 Bigdeli A., Palchetti S., Pozzi D., Reza Hormozi-Nezhad M., Baldelli Bombelli F., Caracciolo G., Mahmoudi M. Exploring Cellular Interactions of Liposomes Using Protein Corona Fingerprints and Physicochemical Properties.
ACS Nano. 2016; 10: 3723–3737. I.F.: 13.334
- 7 Digiaco L., Digman M. A., Gratton E., Caracciolo G. Development of an image Mean Square Displacement (iMSD)-based method as a novel approach to study the intracellular trafficking of nanoparticles.
Acta Biomaterialia. 2016;42: 189-198. I.F.: 6.008
- 8 Colapicchioni V., Tilio M., Digiaco L., Gambini V., Palchetti S., Marchini C., Pozzi D., Occhipinti S., Amici A., Caracciolo G. Personalized liposome–protein corona in the blood of breast, gastric and pancreatic cancer patients.
The International Journal of Biochemistry & Cell Biology. 2016; 75: 180-187. I.F.: 3.905

- 9 Palchetti S., Colapicchioni V., Digiacomo L., Caracciolo G., Pozzi D., Capriotti A.L., La Barbera G., Laganà A.
The protein corona of circulating PEGylated liposomes.
***Biochimica et Biophysica Acta (BBA) – Biomembranes*. 2016; 1858: 189-196.** I.F.: 3.687
- 10 Caracciolo G., Palchetti S., Colapicchioni V., Digiacomo L., Pozzi D., Capriotti A. L., La Barbera G., Laganà A.
Stealth Effect of Biomolecular Corona on Nanoparticle Uptake by Immune Cells.
***Langmuir*. 2015; 31: 10764–10773.** I.F.: 3.993
- 11 Colapicchioni V., Palchetti S., Pozzi D., Marini E. S., Riccioli A., Ziparo E., Papi M., Amenitsch H., Caracciolo G.
Killing cancer cells using nanotechnology: novel poly(I:C) loaded liposome–silica hybrid nanoparticles.
***Journal of Material Chemistry B*. 2015; 3: 7408-7416.** I.F.: 4.872
- 12 Pozzi D., Caracciolo G., Digiacomo L., Colapicchioni V., Palchetti S., Capriotti A. L., Cavaliere C., Zenezini Chiozzi R., Puglisi A., Laganà A.
The biomolecular corona of nanoparticles in circulating biological media.
***Nanoscale*. 2015; 7: 13958-13966.** I.F.: 7.76
- 13 Caracciolo G.
Liposome-protein corona in a physiological environment: Challenges and opportunities for targeted delivery of nanomedicines
***Nanomedicine: Nanotechnology, Biology, and Medicine*. 2015; 11: 543-557.** I.F.: 5.671
- 14 Caracciolo G., Pozzi D., Capriotti A. L., Cavaliere C., Piovesana S., Amenitsch H., Laganà A.
Lipid composition: a “key factor” for the rational manipulation of the liposome–protein corona by liposome design.
***RSC Advances*. 2015; 5: 5967-5975.** I.F.: 3.289
- 15 Caracciolo G., Caputo D., Pozzi D., Colapicchioni V., Coppola R.
Size and charge of nanoparticles following incubation with human plasma of healthy and pancreatic cancer patients.
***Colloids and Surfaces B: Biointerfaces*. 2014; 123: 673-678.** I.F.: 3.902
- 16 Caracciolo G., Pozzi D., Capriotti A. L., Cavaliere C., Piovesana S., La Barbera G., Amici A., Laganà A.
The liposome–protein corona in mice and humans and its implications for in vivo delivery.
***Journal of Material Chemistry B*. 2014; 2: 7419-7428.** I.F.: 4.872
- 17 Pozzi D., Marchini C., Cardarelli F., Salomone F., Coppola S., Montani M., Elexpuru Zabaleta M., Digman M. A., Gratton E., Colapicchioni V., Caracciolo G.
Mechanistic evaluation of the transfection barriers involved in lipid-mediated gene delivery: Interplay between nanostructure and composition.
***Biochimica et Biophysica Acta (BBA) – Biomembranes*. 2014; 1838: 957-967.** I.F.: 3.687
- 18 Pozzi D., Colapicchioni V., Caracciolo G., Piovesana S., Capriotti A.L., Palchetti S., De Grossi S., Riccioli A., Amenitsch H., Laganà A.
Effect of polyethyleneglycol (PEG) chain length on the bio–nano-interactions between PEGylated lipid nanoparticles and biological fluids: from nanostructure to uptake in cancer cells.
***Nanoscale*. 2014; 6: 2782-2792.** I.F.: 7.76
- 19 Caracciolo G., Cardarelli F., Pozzi D., Salomone F., Maccari G., Bardi G., Capriotti A. L., Cavaliere C., Papi M., Laganà A.
Selective targeting capability acquired with a protein corona adsorbed on the surface of 1,2-dioleoyl-3-trimethylammonium propane/dna nanoparticles
***ACS Applied Materials & Interfaces*. 2013; 5: 13171-13179.** I.F.: 7.145

- 20** Pozzi D., Marchini C., Cardarelli F., Rossetta A., Colapicchion V., Amici A., Montani M., Motta S., Brocca P., Cantù L., Caracciolo G.
Mechanistic Understanding of Gene Delivery Mediated by Highly Efficient Multicomponent Envelope-Type Nanoparticle Systems.
Molecular Pharmaceutics. 2013; 10: 4654-4665. I.F.: 4.342
- 21** Pozzi D., Marchini C., Cardarelli F., Bifone A., Garulli C., Caracciolo G.
Transfection efficiency boost of cholesterol-containing lipoplexes.
Biochimica et Biophysica Acta (BBA) – Biomembranes. 2012; 1818: 2335-2343. I.F.: 3.687
- 22** Cardarelli F., Pozzi D., Bifone A., Marchini C., Caracciolo G.
Cholesterol-dependent macropinocytosis and endosomal escape control the transfection efficiency of lipoplexes in CHO Living Cells.
Molecular Pharmaceutics. 2012; 9: 334-340. I.F.: 4.342
- 23** Caracciolo G., Pozzi D., Capriotti A. L., Cavaliere C., Foglia P., Amenitsch H., Laganà A.
Evolution of the protein corona of lipid gene vectors as a function of plasma concentration.
Langmuir. 2011; 27: 15048–15053. I.F.: 3.993
- 24** Caracciolo G., Pozzi D., Capriotti A. L., Marianecchi C., Carafa M., Marchini C., Montani M., Amici A., Amenitsch H., Digman M. A. Gratton E., Sanchez S. S., Laganà A.
Factors determining the superior performance of lipid/DNA/protamine nanoparticles over lipoplexes.
Journal of Medicinal Chemistry. 2011; 54: 4160-4171. I.F.: 5.589
- 25** Pozzi D., Caminiti R., Marianecchi C., Carafa M., Santucci E., Candeloro De Sanctis S., Caracciolo G.
Effect of cholesterol on the formation and hydration behavior of solid-supported niosomal membranes.
Langmuir. 2010; 26: 2268-2273. I.F.: 3.993
- 26** Pozzi D., Caracciolo G., Caminiti R., Candeloro De Sanctis S., Amenitsch H., Marchini C., Montani M., Amici A.
Toward the rational design of lipid gene vectors: shape coupling between lipoplex and anionic cellular lipids controls the phase evolution of lipoplexes and the efficiency of DNA release.
ACS Applied Materials & Interfaces. 2009; 1: 2237–2249. I.F.: 7.145
- 27** Caracciolo G., Pozzi D., Caminiti R., Marchini C., Montani M., Amici A., Amenitsch H.
Enhanced transfection efficiency of multicomponent lipoplexes in the regime of optimal membrane charge density.
The Journal of Physical Chemistry B. 2008; 112: 11298–11304. I.F.: 3.187
- 28** Caracciolo G., Pozzi D., Caminiti R., Marchini C., Montani M., Amici A., Amenitsch H.
Transfection efficiency boost by designer multicomponent lipoplexes
Biochimica et Biophysica Acta (BBA) – Biomembranes. 2007; 1768: 2280-2292. I.F.: 3.687
- 29** Caracciolo G., Pozzi D., Caminiti R., Mancini G., Luciani P., Amenitsch H.
Observation of a rectangular DNA superlattice in the liquid-crystalline phase of cationic lipid/DNA complexes.
Journal of the American Chemical Society. 2007; 129: 10092-10093. I.F.: 13.038
- 30** Caracciolo G., Pozzi D., Amenitsch H., Caminiti R.
Multicomponent cationic lipid-DNA complex formation: role of lipid mixing.
Langmuir. 2005; 21: 11582-11587. I.F.: 3.993

Firmato

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