

119) Caputo D., Cascone C., **Pozzi D.**, Digiocomo L., Palchetti S., Coppola R., Caracciolo G. Synergistic analysis of protein corona and haemoglobin levels detects pancreatic cancer. *Cancers*, 2021, 13(1), pp. 1–11, 93

118) E Quagliarini, R Di Santo, **D Pozzi**, G Caracciolo. Protein corona-enabled serological tests for early stage cancer detection *Sensors International*, 100025

117) Luca Digiocomo, Kourosh Jafari-Khouzani, Sara Palchetti, **Daniela Pozzi**, Anna Laura Capriotti, Aldo Laganà, Riccardo Zenezini Chiozzi, Damiano Caputo, Chiara Cascone, Roberto Coppola, Gerardo Flammia, Vittorio Altomare Antonella Grasso, Morteza Mahmoudi, Giulio Caracciolo. Protein corona sensor array detects breast and prostate cancers. *Nanoscale* 12 (32), 16697-16704 (2020)

116) Erica Quagliarini, Riccardo Di Santo, **Daniela Pozzi**, Paolo Tentori, Francesco Cardarelli, Giulio Caracciolo. Mechanistic Insights into the Release of Doxorubicin from Graphene Oxide in Cancer Cells. *Nanomaterials* 10 (8), 1482 (2020).

115) Riccardo Di Santo, Luca Digiocomo, Erica Quagliarini, Anna Laura Capriotti, Aldo Laganà, Riccardo Zenezini Chiozzi, Damiano Caputo, Chiara Cascone, Roberto Coppola, **Daniela Pozzi**, Giulio Caracciolo Personalized graphene oxide-protein corona in the human plasma of pancreatic cancer patients *Frontiers in Bioengineering and Biotechnology-Biomaterials* 8, Article 491, (2020).

114) Erica Quagliarini, Riccardo Di Santo, Sara Palchetti, Gianmarco Ferri, Francesco Cardarelli, **Daniela Pozzi**, Giulio Caracciolo Effect of Protein Corona on The Transfection Efficiency of Lipid-Coated Graphene Oxide-Based Cell Transfection Reagents *Pharmaceutics* 12 (2), 113, (2020).

113) Luca Digiocomo, **Daniela Pozzi**, Sara Palchetti, Alessandra Zingoni, Giulio Caracciolo Impact of the protein corona on nanomaterial immune response and targeting ability *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, e1615 (2020).

112) Sara Palchetti, Luca Digiocomo, Francesca Giulimondi, **Daniela Pozzi**, Giovanna Peruzzi, Gianmarco Ferri, Heinz Amenitsch, Francesco Cardarelli, Morteza Mahmoudi, Giulio Caracciolo A mechanistic explanation of the inhibitory role of the protein corona on liposomal gene expression. *Biochimica et Biophysica Acta (BBA) – Biomembranes* 1862, 183159 (2020).

111) Giorgia La Barbera, Anna Laura Capriotti, Giulio Caracciolo, Chiara Cavaliere, Andrea Cerrato, Carmela Maria Montone, Susy Piovesana, **Daniela Pozzi**, Erica Quagliarini, Aldo Laganà. A comprehensive analysis of liposomal biomolecular corona upon human plasma incubation: The evolution towards the lipid corona. *Talanta* 209, 120487 (2020).

110) Giulio Caracciolo, Reihaneh Safavi-Sohi, Reza Malekzadeh, Hossein Poustchi, Mahdi Vasighi, Riccardo Zenezini Chiozzi, Anna Laura Capriotti, Aldo Laganà, Mohammad Hajipour, Marina Di Domenico, Angelina Di Carlo, Damiano Caputo, Haniyeh Aghaverdi, Massimiliano Papi, Valentina Palmieri, Angela Santoni, Sara Palchetti, Luca Digiocomo, **Daniela Pozzi**, Kenneth S. Suslick, Morteza Mahmoudi Disease-specific protein corona sensor arrays may have disease detection capacity. *Nanoscale Horizons* 4, 1063-1076 (2020).

109) Riccardo Di Santo, Erica Quagliarini, Sara Palchetti, **Daniela Pozzi**, Valentina Palmieri, Giordano Perini, Massimiliano Papi, Anna Laura Capriotti, Aldo Laganà, Giulio Caracciolo Microfluidics generated lipid-graphene oxide nanoparticles as an efficient gene delivery system *Applied Physics Letters* 114 (23), 233701 (2019).

108) Massimiliano Papi, Valentina Palmieri, Luca Digiocomo, Francesca Giulimondi, Sara Palchetti, **Daniela Pozzi**, Roberto Coppola, Damiano Caputo, Giulio Caracciolo Converting the personalized biomolecular corona of graphene oxide nanoflakes into a high- throughput diagnostic test for pancreatic cancer *Nanoscale* 11(32):15339-46 (2019).

107) Francesca Giulimondi, Luca Digiocomo, **Daniela Pozzi**, Sara Palchetti, Elisabetta Vulpis, Anna Laura Capriotti, Riccardo Zenezini Chiozzi, Aldo Laganà, Heinz Amenitsch, Morteza Mahmoudi, Isabella Scrpanti, Alessandra Zingoni, Giulio Caracciolo Interplay of protein corona and immune cells controls blood residency of liposomes *Nature Communications* 10, 1-11 (2019).

106) Luca Digiocomo, Sara Palchetti, Francesca Giulimondi, **Daniela Pozzi**, Riccardo Zenezini Chiozzi, Anna Laura Capriotti, Aldo Laganà, Giulio Caracciolo

The biomolecular corona of gold nanoparticles in a controlled microfluidic environment
Lab on a Chip, 19, 2557-2567 (2019).

105) Massimiliano Papi, Valentina Palmieri, Sara Palchetti, **Daniela Pozzi**, Luca Digiocomo, Elia Guadagno, Marialaura del Basso De Caro, Marina Di Domenico, Serena Ricci, Roberto Pani, Morteza Mahmoudi, Angelina Di Carlo, Giulio Caracciolo

Exploitation of nanoparticle-protein interactions for early disease detection .Applied Physics Letters, 114 (16), 163702 (2019)

104) Sara Palchetti, Damiano Caputo, Luca Digiocomo, Anna Laura Capriotti, Roberto Coppola, **Daniela Pozzi**, Giulio Caracciolo

Protein Corona Fingerprints of Liposomes: New Opportunities for Targeted Drug Delivery and Early Detection in Pancreatic Cancer. Pharmaceutics, 11(1): 31 (2019).

103) Riccardo Di Santo, Luca Digiocomo, Sara Palchetti, Valentina Palmieri, Giordano Perini, **Daniela Pozzi**, Massimiliano Papi, Giulio Caracciolo

Microfluidic manufacturing of surface-functionalized graphene oxide nanoflakes for gene delivery Nanoscale, 11, 2733-2741 (2019).

102) Marina Di Domenico, **Daniela Pozzi**, Sara Palchetti, Luca Digiocomo, Rosamaria Iorio, Camilla Siciliano, Giuliana Settembre, Matteo Pierdiluca, Mario Santini, Antonio Giordano, Luigi Frati, Morteza Mahmoudi, Giulio Caracciolo Nanoparticle-biomolecular corona: A New Approach for the Early Detection of Non-Small Cell Lung Cancer. Journal of Cellular Physiology, 234(6), 9378-9386 (2019).

101) Sara Palchetti, Luca Digiocomo, **Daniela Pozzi**, Riccardo Zenezini Chiozzi, Anna Laura Capriotti, Aldo Laganà, Roberto Coppola, Damiano Caputo, Morteza Mahmoudi, Giulio Caracciolo Effect of glucose on liposome-plasma protein interactions: relevance for the physiological response of clinically approved liposomal formulations Advanced Biosystems 3, no. 2 1800221 (2019).

100) Antonietta Arcella, Sara Palchetti, Luca Digiocomo, **Daniela Pozzi**, Anna Laura Capriotti, Luigi Frati, Maria Antonietta Oliva, Georgia Tsouli, Rossella Rota, Isabella Screpanti, Morteza Mahmoudi, Giulio Caracciolo. Brain Targeting by Liposome–Biomolecular Corona Boosts Anticancer Efficacy of Temozolomide in Glioblastoma Cells. ACS Chemical Neuroscience, 9 (12), 3166–3174 (2018).

99) Giulio Caracciolo, Sara Palchetti, Luca Digiocomo, Riccardo Zenezini Chiozzi, Anna Laura Capriotti, Heinz Amenitsch, Paolo Maria Tentori, Valentina Palmieri, Massimiliano Papi, Francesco Cardarelli, **Daniela Pozzi**, Aldo Laganà.

Human Biomolecular Corona of Liposomal Doxorubicin: The Overlooked Factor in Anticancer Drug Delivery. ACS Applied Materials and Interfaces, 10(27), 22951-22962 (2018).

98) Damiano Caputo, Maria Cartillone, Chiara Cascone, **Daniela Pozzi**, Luca Digiocomo, Sara Palchetti, Giulio Caracciolo, Roberto Coppola.

Improving the accuracy of pancreatic cancer clinical staging by exploitation of nanoparticle-blood interactions: A pilot study. Pancreatology, 18(6), 661-665 (2018).

97) Luca Digiocomo, Sara Palchetti, **Daniela Pozzi**, Augusto Amici, Giulio Caracciolo, Cristina Marchini.

Cationic lipid/DNA complexes manufactured by microfluidics and bulk self-assembly exhibit different transfection behavior. Biochemical and Biophysical Research Communications, 503(2), 508-512 (2018).

96) Luca Digiocomo, **Daniela Pozzi**, Heinz Amenitsch, Giulio Caracciolo. Impact of the biomolecular corona on the structure of PEGylated liposomes. Biomaterials Science, 58(9), 1884-1888 (2017).

95) Massimiliano Papi, Damina Caputo, Valentina Palmieri, Roberto Coppola, Sara Palchetti, Francesca Bugli, Cristina Martini, Luca Digiocomo, **Daniela Pozzi**, Giulio Caracciolo.

Clinically approved PEGylated nanoparticles are covered by a protein corona that boosts the uptake by cancer cells. Nanoscale, 9(29), 10327-10334 (2017).

94) Luca Digiocomo, Francesco Cardarelli, **Daniela Pozzi**, Sara Palchetti, Michelle A. Digman, Enrico Gratton, Anna Laura Capriotti, Morteza Mahmoudi, Giulio Caracciolo

An apolipoprotein-enriched biomolecular corona switches the cellular uptake mechanism and trafficking pathway of lipid nanoparticles. Nanoscale, 9(44), 17254-17262 (2017).

93) Sara Palchetti, **Daniela Pozzi**, Anna Laura Capriotti, Giorgia La Barbera, Riccardo Zenezini Chiozzi, Luca Digiocomo, Giovanna Peruzzi, Giulio Caracciolo, Aldo Laganà.

Influence of dynamic flow environment on nanoparticle-protein corona: from protein patterns to uptake in cancer cells. *Colloids and Surfaces B: Biointerfaces* 153, 263-271 (2017).

92) Damiano Caputo, Massimiliano Papi, Roberto Coppola, Sara Palchetti, Luca Digiocomo, Giulio Caracciolo, **Daniela Pozzi**.

A protein corona-enabled blood test for early cancer detection. *Nanoscale*, 9(1), 349-354 (2017).

91) María Martínez-Negro, Giulio Caracciolo, Sara Palchetti, **Daniela Pozzi**, Anna Laura Capriotti, Chiara Cavaliere, Aldo Laganà, Carmen Ortíz-Mellet, Juan M. Benito, José M. García-Fernández, Emilio Aicart, Elena Junquera.

Biophysics and protein corona analysis of Janus cyclodextrin-DNA nanocomplexes. Efficient cellular transfection on cancer cells. *Biochimica et Biophysica Acta - General Subjects*, 1861(7), 1737-1749 (2017).

90) Sara Palchetti, **Daniela Pozzi**, Cristina Marchini, Augusto Amici, Cristina Andreani, Caterina Bartolacci, Francesco Cardarelli, Carmine Di Rienzo, Giovanna Peruzzi, Heinz Amenitsch, Rocco Palermo, Isabella Scrpanti, Giulio Caracciolo.

Manipulation of lipoplex concentration at the cell surface boosts transfection efficiency in hard-to-transfect cells. *Nanomedicine: Nanotechnology, Biology and Medicine*, 13(2), 681-691 (2017).

89) Augusto Amici, Giulio Caracciolo, Luca Digiocomo, Valentina Gambini, Cristina Marchini, Martina Tilio, Anna Laura Capriotti, Valentina Colapicchioni, Roberto Matassa, Giuseppe Familiari, Sara Palchetti, **Daniela Pozzi**, Morteza Mahmoudi, Aldo Laganà.

In vivo protein corona patterns of lipid nanoparticles. *RSC Advances*, 77(2), 1137-1145 (2017).

88) Sara Palchetti, Luca Digiocomo, **Daniela Pozzi**, Giovanna Peruzzi, Elisa Micarelli, Morteza Mahmoudi, Giulio Caracciolo.

Nanoparticles-cell association predicted by protein corona fingerprints.

Nanoscale, 8(25), 12755-12763 (2016).

87) Sara Palchetti, **Daniela Pozzi**, Morteza Mahmoudi, Giulio Caracciolo.

Exploitation of nanoparticle-protein corona for emerging therapeutic and diagnostic applications. *Journal of Materials Chemistry B*, 4(25), 4376-4381 (2016).

86) Francesco Cardarelli, Luca Digiocomo, Cristina Marchini, Augusto Amici, Fabrizio Salomone, Alessandro Rossetta, Enrico Gratton, **Daniela Pozzi**, Giulio Caracciolo.

Brownian diffusion governs the intracellular trafficking of Lipofectamine-based gene delivery vectors. *Scientific Reports*, 6, 25879 (2016).

85) Giuseppe Fiume, Carmine Di Rienzo, Laura Marchetti, **Daniela Pozzi**, Giulio Caracciolo, Francesco Cardarelli.

Single-cell real-time imaging of gene expression provides insights into the mechanism of lipid-based DNA transfection. *Biochemical and Biophysical Research Communications*, 474(1), 8-14 (2016).

84) Simona Motta, Valeria Rondelli, Laura Cantu', Elena Del Favero, Massimo Aureli, **Daniela Pozzi**, Giulio Caracciolo, Paola Brocca.

What the cell surface does not see: the gene vector under the protein corona.

Colloids and Surfaces B: Biointerfaces, 141, 170-178 (2016).

83) Arafah Bigdeli, Sara Palchetti, **Daniela Pozzi**, Mohammad Reza Hormozi-Nezhad, Francesca Baldelli Bombelli, Giulio Caracciolo, Morteza Mahmoudi.

Exploring Cellular Interactions of Liposomes Using Protein Corona Fingerprints and Physicochemical Properties. *ACS Nano*, 10(3), 3723-3737 (2016).

82) Sara Palchetti, Valentina Colapicchioni, Luca Digiocomo, Giulio Caracciolo, **Daniela Pozzi**, Anna Laura Capriotti, Giorgia La Barbera, Aldo Laganà.

The protein corona of circulating PEGylated liposomes.

Biochimica et Biophysica Acta - Biomembranes, 1858(2), 189-196 (2016).

81) Valentina Colapicchioni, Martina Tilio, Luca Digiocomo, Valentina Gambini, Sara Palchetti, Cristina Marchini, **Daniela Pozzi**, Sergio Occhipinti, Augusto Amici, and Giulio Caracciolo.

Personalized liposome-protein corona in the blood of breast, gastric and pancreatic cancer patients. *International Journal of Biochemistry and Cell Biology*, 75, 180-187 (2016).

80) Giulio Caracciolo, Sara Palchetti, Valentina Colapicchioni, Luca Digiocomo, **Daniela Pozzi**, Anna Laura Capriotti, Giorgia La Barbera, and Aldo Laganà

Stealth effect of biomolecular corona on nanoparticle uptake by immune cells
Langmuir, 31, 10764–10773 (2015).

79) Maura Montani, Cristina Marchini, Cristina Andreani, Caterina Bartolacci, Augusto Amici, **Daniela Pozzi**, Giulio Caracciolo.
Getting the most from gene delivery by repeated DNA transfections.
Applied Physics Letters, 106(23), 233701 (2015).

78) Luciano De Sio, Giulio Caracciolo, Ferdinanda Annesi, Tiziana Placido, **Daniela Pozzi**, Roberto Comparelli, Alfredo Pane, Maria Lucia Curri, Angela Agostiano, Roberto Bartolino.
Plasmonics meets biology through optics.
Nanomaterials, 5(2), 1022-1033 (2015).

77) Valentina Colacicchioni, Sara Palchetti, **Daniela Pozzi**, Elettra Sara Marini, Anna Riccioli, Massimiliano Papi, Heinz Amenitsch, Giulio Caracciolo.
Killing cancer cells with nanotechnology: novel poly(I:C) loaded liposome-silica hybrid nanoparticles. Journal of Materials Chemistry B, 3(37), 7408-7416 (2015).

76) **Daniela Pozzi**, Giulio Caracciolo, Luca Digiocomo, Valentina Colacicchioni, Sara Palchetti, Anna Laura Capriotti, Chiara Cavaliere, Riccardo Zenezini Chiozzi, Antonio Puglisi, Aldo Laganà
The biomolecular corona of nanoparticles in circulating biological media
Nanoscale, 7(33), 13958-13966 (2015).

75) Luciano De Sio, Giulio Caracciolo, Tiziana Placido, **Daniela Pozzi**, Roberto Comparelli, Ferdinanda Annesi, Maria Lucia Curri, Angela Agostiano and Roberto Bartolino. Applications of nanomaterials in modern medicine.
Rendiconti Lincei, 26, 231-237 (2015).

74) **Daniela Pozzi**, Giulio Caracciolo, Anna Laura Capriotti, Chiara Cavaliere, Giorgia La Barbera, Thomas J. Anchordoquy, Aldo Laganà.
Surface chemistry and serum type both determine the nanoparticle-protein corona.
Journal of Proteomics, 119, 209-217 (2015).

73) Giulio Caracciolo, **Daniela Pozzi**, Anna Laura Capriotti, Chiara Cavaliere, Susy Piovesana, Heinz Amenitsch, Aldo Laganà.
Lipid composition: a “key factor” for the rational manipulation of the liposome–protein corona by liposome design
RSC Advances, 5(8), 5967-5975 (2015).

72) Giulio Caracciolo, Damiano Caputo, **Daniela Pozzi**, Valentina Colacicchioni, Roberto Coppola. Size and charge of nanoparticles following incubation with human plasma of healthy and pancreatic cancer patients.
Colloids and Surfaces B: Biointerfaces, 123, 673-678 (2014).

71) Anna Laura Capriotti, Giulio Caracciolo, Chiara Cavaliere, Valentina Colacicchioni, Susy Piovesana, **Daniela Pozzi**, Aldo Laganà.
Analytical Methods for Characterizing the Nanoparticle–Protein Corona.
Chromatographia, 77(11-12), 755 (2014).

70) Giulio Caracciolo, **Daniela Pozzi**, Anna Laura Capriotti, Chiara Cavaliere, Susy Piovesana, Giorgia La Barbera, Augusto Amici and Aldo Laganà.
The liposome–protein corona in mice and humans and its implications for in vivo delivery. Journal of Materials Chemistry B, 2(42), 7419-7428 (2014).

69) **Daniela Pozzi**, Giulio Caracciolo, Anna Laura Capriotti, Chiara Cavaliere, Susy Piovesana, Valentina Colacicchioni, Sara Palchetti, Anna Riccioli, Aldo Laganà.
A proteomics-based methodology to investigate the protein corona effect for targeted drug delivery. Molecular BioSystems, 10(11), 2815-2819 (2014).

68) **Daniela Pozzi**, Francesco Cardarelli, Fabrizio Salomone, Cristina Marchini, Heinz Amenitsch, Giorgia La Barbera, Giulio Caracciolo.
Role of cholesterol on the transfection barriers of cationic lipid/DNA complexes. Applied Physics Letters, 105(7), 073701 (2014).

67) **Daniela Pozzi**, Valentina Colacicchioni, Giulio Caracciolo, Susy Piovesana, Anna Laura Capriotti, Sara Palchetti, Stefania De Grossi, Anna Riccioli, Heinz Amenitsch, Aldo Laganà.
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, 6(5), 2782-2792 (2014).

66) Daniela Pozzi, Cristina Marchini, Francesco Cardarelli, Fabrizio Salomone, Stefano Coppola, Maura Montani, Maria Elexpuru Zabaleta, Michelle A. Digman, Enrico Gratton, Valentina Colapicchioni, Giulio Caracciolo
Mechanistic evaluation of the transfection barriers involved in lipid-mediated gene delivery: interplay between nanostructure and composition *Biochimica et Biophysica Acta-Biomembranes*, 1838(3), 957-967 (2014).

65) Giulio Caracciolo, Francesco Cardarelli, **Daniela Pozzi**, Fabrizio Salomone, Giuseppe Maccari, Giuseppe Bardi, Anna Laura Capriotti, Chiara Cavaliere, Massimiliano Papi, Aldo Laganà. DOTAP/DNA nanoparticles acquire selective targeting capability when a protein corona adsorbs on the surface. *ACS Applied Materials and Interfaces*, 5(24), 13171-13179 (2013).

64) Sara Palchetti, **Daniela Pozzi**, Anna Riccioli, Elio Ziparo, Valentina Colapicchioni, Heinz Amenitsch, Giulio Caracciolo.
Structural characterization of cationic liposome/poly(I:C) complexes showing high ability in eliminating prostate cancer cells. *RSC Advances*, 3(46), 24597-24604 (2013).

63) Daniela Pozzi, Cristina Marchini, Francesco Cardarelli, Alessandro Rossetta, Valentina Colapicchioni, Augusto Amici, Maura Montani, Simona Motta, Paola Brocca, Laura Cantù, Giulio Caracciolo.
Mechanistic understanding of gene delivery mediated by highly efficient multicomponent envelope- type nanoparticle systems. *Molecular Pharmaceutics*, 10(12), 4654-4665 (2013).

62) Ana Lilia Barrán-Berdón, **Daniela Pozzi**, Giulio Caracciolo, Anna Laura Capriotti, Giuseppe Caruso, Chiara Cavaliere, Anna Riccioli, Sara Palchetti, Aldo Laganà.
Time evolution of nanoparticle–protein corona in human plasma: relevance for targeted drug delivery. *Langmuir*, 29(21), 6485–6494 (2013).

61) Simona Motta, Paola Brocca, Elena del Favero, Laura Cantù, Valeria Rondelli, Augusto Amici, **Daniela Pozzi**, Giulio Caracciolo.
Nanoscale structure of protamine/DNA complexes for gene delivery.
Applied Physics Letters, 102(5), 053703 (2013).

60) Stefano Coppola, **Daniela Pozzi**, Sofia Candeloro De Sanctis, Michelle A. Digman, Enrico Gratton, Giulio Caracciolo.
Quantitative measurement of intracellular transport of nanocarriers by spatio-temporal image correlation spectroscopy. *Methods and Applications in Fluorescence*, 1(1), 015005 (2013).

59) Giulio Caracciolo, **Daniela Pozzi**, Anna Laura Capriotti, Chiara Cavaliere, Aldo Laganà. Effect of DOPE and Cholesterol on the Protein Adsorption onto Lipid Nanoparticles. *Journal of Nanoparticle Research*, 15(3), 1498 (2013).

58) Stefano Coppola, Francesco Cardarelli, **Daniela Pozzi**, Laura C. Estrada, Michelle A. Digman, Enrico Gratton, Angelo Bifone and Giulio Caracciolo.
The role of cytoskeleton networks on lipid-mediated delivery of DNA.
Therapeutic Delivery, 4(2), 191-202 (2013).

57) Carlotta Marianecchi, Federica Rinaldi, Luisa Di Marzio, **Daniela Pozzi**, Giulio Caracciolo, Danieal Manno, Luciana Dini, Donatella Paolino, Christian Celia, Maria Carafa.
Interaction of pH-sensitive non-phospholipid liposomes with cellular mimetic membranes.
Biomedical Microdevices, 15(2), 299-309 (2013).

56) Anna Laura Capriotti, Giulio Caracciolo, Giuseppe Caruso, Chiara Cavaliere, **Daniela Pozzi**, Roberto Samperi, Aldo Laganà
Label-free quantitative analysis for studying the interactions between nanoparticles and plasma proteins *Analytical and Bioanalytical Chemistry*, 405(2-3), 635-645 (2013).

55) Stefano Coppola, Laura C. Estrada, Michelle A. Digman, **Daniela Pozzi**, Enrico Gratton, Giulio Caracciolo.
Intracellular trafficking of cationic liposome–DNA complexes in living cells. *Soft Matter*, 8(30), 7919-7927 (2012).

54) Daniela Pozzi, Cristina Marchini, Francesco Cardarelli, Angelo Bifone, Chiara Garulli, Giulio Caracciolo.
Transfection efficiency boost of cholesterol-containing lipoplexes.
Biochimica et Biophysica Acta-Biomembranes, 1818(9), 2335-2343 (2012).

53) Francesco Cardarelli, **Daniela Pozzi**, Angelo Bifone, Cristina Marchini, Giulio Caracciolo. Cholesterol-dependent macropinocytosis and endosomal escape control the transfection efficiency of lipoplexes in CHO Living Cells.
Molecular Pharmaceutics, 9(2), 334-340 (2012).

52) Anna Laura Capriotti, Giulio Caracciolo, Chiara Cavaliere, Patrizia Foglia, **Daniela Pozzi**, Roberto Samperi, Aldo Laganà.

Do plasma proteins distinguish between liposomes of varying charge density?
Journal of Proteomics, 75(6), 1924-1932 (2012).

51) Giulio Caracciolo, **Daniela Pozzi**, Anna Laura Capriotti, Chiara Cavaliere, Patrizia Foglia, Heinz Amenitsch, Aldo Laganà.

Evolution of the protein corona of lipid gene vectors as a function of plasma concentration. Langmuir, 27(24), 15048-15053 (2011).

50) Anna Laura Capriotti, Giulio Caracciolo, Giuseppe Caruso, Patrizia Foglia, **Daniela Pozzi**, Roberto Samperi, Aldo Laganà.

Differential analysis of “protein corona” profile adsorbed onto different nonviral gene delivery systems. Analytical Biochemistry, 419 (2), 180-189 (2011).

49) Anna Laura Capriotti, Giulio Caracciolo, Chiara Cavaliere, Carlo Crescenzi, **Daniela Pozzi**, Aldo Laganà.

Shotgun proteomics analytical approach for studying proteins adsorbed onto liposome surface. Analytical and Bioanalytical Chemistry, 401 (4), 1195-1202 (2011).

48) Giulio Caracciolo, **Daniela Pozzi**, Sofia Candeloro De Sanctis, Anna Laura Capriotti, Giuseppe Caruso, Roberto Samperi, Aldo Laganà.

Effect of membrane charge density on the protein corona of cationic liposomes: interplay between cationic charge and surface area. Applied Physics Letters, 99(3), 033702 (2011).

47) Giulio Caracciolo, **Daniela Pozzi**, Anna Laura Capriotti, Carlotta Marianelli, Maria Carafa, Cristina Marchini, Maura Montani, Augusto Amici, Heinz Amenitsch, Michelle A. Digman, Enrico Gratton, Susana S. Sanchez, Aldo Laganà. Factors determining the superior performance of Lipid Nanoparticles over Lipoplexes. Journal of Medicinal Chemistry, 54(12), 4160–417 (2011).

46) Anna Laura Capriotti, Giulio Caracciolo, Giuseppe Caruso, Patrizia Foglia, **Daniela Pozzi**, Roberto Samperi, Aldo Laganà.

DNA affects the composition of lipoplex protein corona: a proteomics approach.
Proteomics, 11(16), 3349-3358 (2011).

45) Cristina Marchini, **Daniela Pozzi**, Maura Montani, Cinzia Alfonsi, Augusto Amici, Sofia Candeloro De Sanctis, Michelle A. Digman, Susana Sanchez, Enrico Gratton, Heinz Amenitsch, Attilio Fabbretti, Claudio O. Gualerzi, Giulio Caracciolo.

Role of temperature-independent lipoplex-cell membrane interactions in the efficiency boost of multicomponent lipoplexes. Cancer Gene Therapy, 18(8), 543-552 (2011).

44) Heinz Amenitsch, Giulio Caracciolo, Patrizia Foglia, Valentina Fuscoletti, Piero Giansanti, Carlotta Marianelli, **Daniela Pozzi**, Aldo Laganà.

Existence of Hybrid structures in Cationic Liposome/DNA Complexes revealed by their interaction with plasma proteins. Colloids and Surfaces B: Biointerfaces, 82(1), 141-146 (2011).

43) **Daniela Pozzi**, Carlotta Marianelli, Maria Carafa, Cristina Marchini, Maura Montani, Augusto Amici, Giulio Caracciolo.

Programmed packaging of multicomponent envelope-type nanoparticle system (MENS).
Journal of Controlled Release, 148(1), e87-e88 (2010).

42) **Daniela Pozzi**, Giulio Caracciolo, Cristina Marchini, Maura Montani, Augusto Amici, Luciano Callipo, Anna Laura Capriotti, Chiara Cavaliere, Aldo Laganà.

Surface adsorption of protein corona controls the cell uptake mechanism in efficient cationic liposome/DNA complexes in serum. Journal of Controlled Release, 148(1), e94-e95 (2010).

41) Cristina Marchini, **Daniela Pozzi**, Cinzia Alfonsi, Maura Montani, Augusto Amici, Heinz Amenitsch, Giulio Caracciolo. Coupling between Lipoplex and Plasma Membrane Lipid composition: A Trojan Horse for Cell Entry? Langmuir, 26(17), 13867-13873 (2010).

40) Viviana Orlando, **Daniela Pozzi**, Giulio Caracciolo, Gabriella Augusti Tocco, Stefano Biagioli. Toward an objective evaluation of cell transfection performance.

Applied Physics Letters, 97(15), 153702 (2010).

39) **Daniela Pozzi**, Carlotta Marianelli, Maria Carafa, Cristina Marchini, Maura Montani, Augusto Amici, Giulio

Caracciolo. Programmed Packaging of Multicomponent Envelope-type Nanoparticle System for Gene Delivery. *Applied Physics Letters*, 96(18), 183702 (2010).

38) Daniela Pozzi, Heinz Amenitsch, Cristina Marchini, Giulio Caracciolo.

Phase diagram of DC-Chol-DOPE/DNA complexes suggests strategies for efficient lipoplex transfection. *Applied Physics Letters*, 96(18), 183703 (2010).

37) Anna Laura Capriotti, Giulio Caracciolo, Giuseppe Caruso, Chiara Cavaliere, **Daniela Pozzi**, Roberto Samperi, Aldo Laganà.

Analysis of plasma proteins adsorption onto DC-Chol-DOPE cationic liposomes by HPLC-CHIP coupled to a Q-TOF mass spectrometer.

Analytical and Bioanalytical Chemistry, 398 (7-8), 2895-2903 (2010).

36) Giulio Caracciolo, **Daniela Pozzi**, Augusto Amici, Heinz Amenitsch.

Universality of DNA adsorption behavior on the cationic membranes of nanolipoplexes. *Journal of Physical Chemistry B*, 114(5), 2028–2032 (2010).

35) Giulio Caracciolo, Luciano Callipo, Sofia Candeloro De Sanctis, Chiara Cavaliere, **Daniela Pozzi**, Aldo Laganà. Surface adsorption of protein corona controls the cell internalization mechanism of DC-Chol- DOPE/DNA lipoplexes in serum.

Biochimica et Biophysica Acta – Biomembranes, 1798(3), 536-543 (2010).

34) **Daniela Pozzi**, Ruggero Caminiti, Carlotta Marianelli, Maria Carafa, Elena Santucci, Sofia Candeloro De Sanctis, Giulio Caracciolo.

Effect of cholesterol on the formation and hydration behavior of solid-supported niosomal membranes. *Langmuir*, 26(4), 2268-2273 (2010).

33) **Daniela Pozzi**, Giulio Caracciolo, Ruggero Caminiti, Sofia Candeloro De Sanctis, Heinz Amenitsch, Cristina Marchini, Maura Montani, Augusto Amici.

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, 1(10), 2237–2249 (2009).

32) Cristina Marchini, Maura Montani, Augusto Amici, Heinz Amenitsch, Carlotta Marianelli, **Daniela Pozzi**, Giulio Caracciolo.

Structural stability and increase in size rationalize the efficiency of lipoplexes in serum.

Langmuir, 25(5), 3013-3021 (2009).

31) Cristina Marchini, Maura Montani, Augusto Amici, **Daniela Pozzi**, Ruggero Caminiti, Giulio Caracciolo.

Surface area of lipid membranes regulates the DNA-binding capacity of cationic liposomes. *Applied Physics Letters* 94(3), 033903 (2009).

30) Giulio Caracciolo, **Daniela Pozzi**, Ruggero Caminiti; Carlotta Marianelli, Simone Maglioni, Maria Carafa, Heinz Amenitsch.

Effect of hydration on the structure of solid-supported Niosomal membranes investigated by *in situ* Energy Dispersive X-ray Diffraction. *Chemical Physics Letters*, 462(4-6), 307–312 (2008).

29) Giulio Caracciolo, **Daniela Pozzi**, Ruggero Caminiti, Cristina Marchini, Maura Montani, Augusto Amici, Heinz Amenitsch.

Enhanced transfection efficiency of multicomponent lipoplexes in the regime of optimal membrane charge density. *Journal of Physical Chemistry B*, 112(36), 11298–11304 (2008).

28) Giulio Caracciolo, **Daniela Pozzi**, Ruggero Caminiti, Cristina Marchini, Maura Montani, Heinz Amenitsch.

Effect of pH on the structure of lipoplexes.

Journal of Applied Physics, 104(1), 014701 (2008).

27) Johanna Generosi, Massimo Piccinini, Augusto Marcelli, Stefano Belardinelli, **Daniela Pozzi**, Agostina Congiu Castellano.

Characterization of solid supported lipoplexes by FTIR microspectroscopy study of cyclohexane, piperidine and morpholine with X-ray diffraction and molecular simulations. *Infrared Physics and Technology*, 50(1), 14-20 (2007).

- 26)** Giulio Caracciolo, Cristina Marchini, **Daniela Pozzi**, Ruggero Caminiti, Maura Montani, Augusto Amici, Heinz Amenitsch.
Transfection efficiency boost by designer multicomponent lipoplexes.
Biochimica et Biophysica Acta – Biomembranes, 1768(9), 2280-2292 (2007).
- 25)** Giulio Caracciolo, **Daniela Pozzi**, Giovanna Mancini, Ruggero Caminiti.
Role of the spacer stereochemistry on the structure of solid-supported Gemini surfactants aggregates. *Langmuir*, 23(20), 10040-10043 (2007).
- 24)** Giulio Caracciolo, **Daniela Pozzi**, Heinz Amenitsch, Ruggero Caminiti.
Interaction between lipoplexes and cellular lipids resulting in DNA release is a two-stage process. *Langmuir*, 23(17), 8713-8717 (2007).
- 23)** Giulio Caracciolo, **Daniela Pozzi**, Ruggero Caminiti, Giovanna Mancini, Paola Luciani, Heinz Amenitsch.
Rectangular DNA superlattices in the liquid crystalline phase of cationic Gemini/phospholipid-DNA complexes.
Journal of the American Chemical Society, 129(33), 10092-10093 (2007).
- 22)** Giulio Caracciolo, **Daniela Pozzi**, Ruggero Caminiti, Cristina Marchini, Maura Montani, Augusto Amici, Heinz Amenitsch.
On the correlation between phase evolution of lipoplexes/anionic lipid mixtures and DNA release *Applied Physics Letters*, 91(14), 143903 (2007).
- 21)** Giulio Caracciolo, **Daniela Pozzi**, Ruggero Caminiti.
Hydration effect on the structure of dioleoylphosphocholine bilayers. *Applied Physics Letters*, 90(18), 183901 (2007).
- 20)** Giulio Caracciolo, Cristina Marchini, **Daniela Pozzi**, Ruggero Caminiti, Heinz Amenitsch, Maura Montani, Augusto Amici.
Structural stability against disintegration by anionic lipids rationalizes the efficiency of cationic liposome/DNA complexes.
Langmuir, 23(8), 4498-4508 (2007).
- 19)** Carlo Castellano, Johanna Generosi, **Daniela Pozzi**, Rosario Cantelli. Anelastic spectroscopy as a probe of dynamic properties in lipid membranes. *Materials Science and Engineering A*, 442(1-2), 375-378 (2006).
- 18)** Giulio Caracciolo, **Daniela Pozzi**, Ruggero Caminiti, Cristina Marchini, Maura Montani, Augusto Amici, Heinz Amenitsch.
DNA release from cationic liposome/DNA complexes by anionic lipids.
Applied Physics Letters, 89(23), 233903 (2006).
- 17)** Giulio Caracciolo, **Daniela Pozzi**, Ruggero Caminiti, Heinz Amenitsch. Formation of overcharged cationic lipid/DNA complexes.
Chemical Physics Letters, 429(1-3), 250–254 (2006).
- 16)** Giulio Caracciolo, **Daniela Pozzi**, Ruggero Caminiti.
Is the formation of cationic lipid-DNA complexes a thermodynamically driven phenomenon? Structure and phase behavior of DC-Chol/DNA complexes say not.
Applied Physics Letters, 89(4), 043901 (2006).
- 15)** Giulio Caracciolo, **Daniela Pozzi**, Ruggero Caminiti, Heinz Amenitsch. Two-dimensional lipid mixing entropy regulates the formation of multi-component lipoplexes. *Journal of Physical Chemistry B*, 110(42), 20829-20835 (2006).
- 14)** Giulio Caracciolo, **Daniela Pozzi**, Heinz Amenitsch, Ruggero Caminiti.
One dimensional Thermotropic dilatation area of lipid headgroups within lamellar lipoplexes. *Langmuir*, 22(9), 4267-4273 (2006).
- 13)** **Daniela Pozzi**, Heinz Amenitsch, Ruggero Caminiti, Giulio Caracciolo.
How lipid hydration and temperature affect the structure of DC-Chol/DOPE/DNA lipoplexes. *Chemical Physics Letters*, 422(4-6), 439-445 (2006).
- 12)** Giulio Caracciolo, **Daniela Pozzi**, Heinz Amenitsch, Ruggero Caminiti. Multicomponent cationic lipid/DNA complex formation: role of lipid mixing. *Langmuir*, 21 (25), 11582-11587 (2005).
Fifth Most Cited Langmuir Paper for 2005

- 11) Daniela Pozzi**, Gini Amiconi, Alessandro Arcovito, Marco Girasole, Agostina Congiu Castellano. Haem conformation of Amphibian nitrosylhaemoglobins detected by XANES Spectroscopy. European Physical Journal E, 16(4), 373-379 (2005).
- 10) Francesca Natali, Carlo Castellano, Daniela Pozzi**, Agostina Congiu Castellano. Dynamic properties of an oriented lipid/DNA complex studied by neutron scattering. Biophysical Journal, 88(2), 1081-1090 (2005).
- 9) Giulio Caracciolo, Daniela Pozzi**, Heinz Amenitsch, Ruggero Caminiti. Lipid mixing upon deoxyribonucleic acid-induced liposomes fusion investigated by synchrotron small- angle x-ray scattering. Applied Physics Letters, 87(13), 133901 (2005).
- 8) Carlo Castellano, Francesca Natali, Daniela Pozzi**, Giulio Caracciolo, Agostina Congiu. Dynamical properties of oriented lipid membranes studied by elastic incoherent neutron scattering. Physica B, 350(1-3), 955-958 (2004).
- 7) Johanna Generosi, Carlo Castellano, Roberto Felici, Giovanna Fragneto, Francesca Natali, Daniela Pozzi**, Agostina Congiu. X-ray and neutron reflectivity study of solid-supported lipid membranes prepared by spin coating. Journal of Applied Physics, 96 (11), 6839-6844 (2004).
- 6) Agostina Congiu, Daniela Pozzi**, Claudio Esposito, Carlo Castellano, Giuseppe Mossa. Correlation between structure and transfection efficiency: a study of DC-Chol-DOPE/DNA complexes. Colloids and Surfaces B: Biointerfaces, 36(1), 43-48 (2004).
- 5) Carlo Castellano, Daniela Pozzi**, Giulio Caracciolo, Rosario Cantelli. Dynamics of liposomes gene vectors studied by anelastic spectroscopy. Applied Physics Letters, 83(13), 2701-2703 (2003).
- 4) Giulio Caracciolo, Marco De Spirito, Agostina Congiu Castellano, Daniela Pozzi**, Gino Amiconi, Angela De Pascalis, Giuseppe Arcovito, Ruggero Caminiti. Protofibrils within fibrin fibres are packed together in a regular array. Thrombosis and Haemostasis, 89(4), 632-637 (2003).
- 3) Giulio Caracciolo, Daniela Pozzi**, Ruggero Caminiti, Agostina Congiu Castellano. Structural characterization of a new lipid/DNA complex showing a selective transfection efficiency in ovarian cancer cells. European Physical Journal E, 10(4), 331-336 (2003).
- 2) Francesca Natali, Federico Boffi, Adalberto Bonincontro, Emanuele Bultrini, Giulio Caracciolo, Stefania Cinelli, Giuseppe Onori, Daniela Pozzi**, Agostina Congiu Castellano. Changes in protein dynamics induced under Gdn-HCl denaturation. Applied Physics A: Materials Science and Processing, 74(2), S1579-S1581 (2002).
- 1) Giulio Caracciolo, Ruggero Caminiti, Daniela Pozzi**, Massimiliano Friello, Federico Boffi, Agostina Congiu Castellano. Self-Assembly of cationic liposomes-DNA: a structural and thermodynamic study by Energy Dispersive X-ray Diffraction. Chemical Physics Letters, 351(3-4), 222-228 (2002).