

# **Silvia ARPICCO**

## **CURRICULUM VITAE**

### **Education and training**

1992: Degree in Pharmaceutical Chemistry and Technology (University of Torino)

1994: Degree in Pharmacy (University of Torino)

1998: Ph.D. in Pharmaceutical Science (University of Torino)

### **Employment and experience**

1992-1994: fellowships from Menarini Ricerche Sud-Divisione Biotecnologia for a research dealing with the preparation of immunotoxins for clinical use

1999-2006: Assistant Professor (University of Torino)

2006-2019: Associate Professor (University of Torino)

From 2019: Full Professor (University of Torino)

### **Teaching activities**

Responsible for the course “Technology and legislation of herbal products“ Herbal Products Techniques Bachelor Degree

Responsible for the courses “Advanced Pharmaceutical Technology” and “Drug Quality and Industrial Strategy” Pharmaceutical Chemistry and Technology Master Degree

Responsible for the course Advances in Pharmaceutical Technology (nanomedicine and drug delivery) PhD in Pharmaceutical and Biomolecular Sciences

Lectures in different universities and European summer school

### **Research experience**

The research activity mainly concerns the delivery of drugs with liposomes and nanoparticles and the conjugation with proteins and polymers and the association with targeting moieties able to specifically recognize tumoral antigens expressed on cancer cell surface. Moreover, I collaborated in the study of analytical methods and the evaluation of the clinical pharmacokinetics of antitumor drugs in clinical practice.

Reviewer of scientific papers for the most important journals of my scientific domain.

I am expert for several selection committee [Marie Skłodowska-Curie Individual Fellowships; H2020-FETOPEN; Institut National du Cancer; programma SIR (Scientific Independence of young Researchers); Bandi Vinci e Galileo, Università Italo Francese (Université Franco Italienne)].

I am a member of Controlled Release Society - Italy Chapter, member of the Interdipartimental Center NIS (Nanostructured Interfaces and Surfaces) (University of Turin), member of the Società Italiana di Tecnologia e Legislazione Farmaceutiche (SITELF).

Number of publications: 100; H-index (Scopus): 33; Total citations (Scopus): 4487

### **Publications:**

- 1) D. Parente, G. Raucci, B. Celano, A. Pacilli, L. Zanoni, S. Canevari, E. Adobati, M.I. Colnaghi, F. Dosio, S. Arpicco, L. Cattel, A. Mele, R. De Santis (1996) "Clavin, a type-1 ribosome-inactivating protein from

- Aspergillus clavatus* IFO 8605 cDNA isolation, heterologous expression, biochemical and biological characterization of the recombinant protein" *European Journal of Biochemistry*, **239**, 272-280.
- 2) P. Brusa, F. Dosio, S. Coppo, D. Pacchioni, S. Arpicco, P. Crosasso, L. Cattel (1997) "In vitro and in vivo antitumor activity of immunoconjugates prepared by linking 5-fluorouridine to antiadenocarcinoma monoclonal antibody" *Il Farmaco*, **52**, (2) 71-81.
  - 3) S. Arpicco, F. Dosio, P. Brusa, P. Crosasso, L. Cattel (1997) "New coupling reagents for the preparation of disulfide cross-linked conjugates with increased stability" *Bioconjugate Chemistry*, **8**, (3) 327-337.
  - 4) P. Crosasso, P. Brusa, F. Dosio, S. Arpicco, D. Pacchioni, F. Schuber, L. Cattel (1997) "Antitumoral activity of liposomes and immunoliposomes containing 5-fluorouridine prodrugs" *Journal of Pharmaceutical Sciences*, **86**, (7) 832-839.
  - 5) F. Dosio, P. Brusa, P. Crosasso, S. Arpicco, L. Cattel (1997) "Preparation, characterization and properties in vitro and in vivo of a paclitaxel-albumin conjugate" *Journal of Controlled Release*, **47**, 293-304.
  - 6) S. Arpicco, P. Brusa, F. Dosio, G. Grossa, P. Crosasso, L. Cattel (1997) "Increased distribution of paclitaxel delivered by human albumin: role of a poly(ethylene glycol) derivative" *Pharmacevtski Vestnik*, **48**, 270-271.
  - 8) M. Ceruti, F. Rocco, F. Viola, G. Balliano, P. Milla, S. Arpicco, L. Cattel (1998) "29-methylidene-2,3-oxidosqualene derivatives as stereospecific mechanism-based inhibitors of liver and yeast oxidosqualene cyclase" *Journal of Medicinal Chemistry*, **41**, 540-554.
  - 9) F. Dosio, S. Arpicco, E. Adobati, S. Canevari, P. Brusa, R. De Santis, D. Parente, P. Pignanelli, D.R.M. Negri, M.I. Colnaghi, L. Cattel (1998) "Role of cross-linking agents in determining the biochemical and pharmacokinetic properties of Mgr6-Clavin immunotoxins" *Bioconjugate Chemistry*, **9**, (3) 372-381.
  - 10) F. Dosio, S. Arpicco, S. Canevari, M. Figini, D. Gastaldi (1999) "Single-step purification of immunotoxins containing a high ionic charge ribosome inactivating protein clavin by carboxymethyl high-performance membrane chromatography" *Journal of Chromatography A*, **830**, 329-335. 9 bis) Lettera attestante la citazione dell'articolo 32 nel Current Awareness in Biomedicine.
  - 11) L. Cattel, F. Dosio, P. Brusa, S. Arpicco (1999) "The role of conjugation processes and crosslinking agent in the preparation of molecular/particulate conjugates: a review" *STP Pharma Science*, **9**, 307-319.
  - 12) M. Ceruti, V. Tagini, V. Recalenda, S. Arpicco, L. Cattel, M. Airolidi, C. Bumma (1999) "Docetaxel in combination with epirubicin in metastatic breast cancer: pharmacokinetic interactions" *Il Farmaco*, **54**, 733-739.
  - 13) P. Crosasso, M. Ceruti, P. Brusa, S. Arpicco, F. Dosio, L. Cattel (2000) "Preparation, characterization and properties of sterically stabilized paclitaxel-containing liposomes" *Journal of Controlled Release*, **63**, 19-30.
  - 14) M. Ceruti, P. Crosasso, P. Brusa, S. Arpicco, F. Dosio, L. Cattel (2000) "Preparation, characterization and in vitro and in vivo properties of liposomes containing water-soluble prodrugs of paclitaxel" *Journal of Controlled Release*, **63**, 141-153.
  - 15) B. Stella, S. Arpicco, M.T. Peracchia, D. Desmaële, J. Hoebke, M. Renoir, J. D'Angelo, L. Cattel, P. Couvreur (2000) "Design of folic acid-conjugated nanoparticles for drug targeting" *Journal of Pharmaceutical Sciences*, **89**, 1452-1464.
  - 16) F. Dosio, S. Arpicco, P. Brusa, B. Stella, L. Cattel (2001) "Poly(ethylene glycol)-human serum albumin-paclitaxel conjugates: preparation, characterization and pharmacokinetics" *Journal of Controlled Release*, **76**, 107-117.
  - 17) M. Ceruti, G. Balliano, F. Rocco, P. Milla, S. Arpicco, L. Cattel, F. Viola (2001) "Vinyl sulfide derivatives of truncated oxidosqualene as selective inhibitors of oxidosqualene and squalene-hopene cyclases" *Lipids*, **36**, 629-636.
  - 18) L. Cattel, V. Recalenda, M. Airolidi, V. Tagini, S. Arpicco, P. Brusa, C. Bumma (2001) "A sequence-dependent combination of docetaxel and vinorelbine: pharmacokinetic interactions" *Farmaco*, **56**, 779-784.
  - 19) M.L. Immordino, P. Brusa, B. Stella, S. Arpicco, F. Dosio, L.Cattel (2001) "Preparazione e caratterizzazione di liposomi convenzionali ed a lunga circolazione contenenti taxani" *Acta Technologiae et Legis Medicamenti*, vol. XII, 102-107.
  - 20) S. Arpicco, F. Dosio, A. Bolognesi, C. Lubelli, P. Brusa, B. Stella, M. Ceruti, L. Cattel (2002) "Novel Poly(ethylene glycol) derivatives for preparation of ribosome-inactivating protein conjugates" *Bioconjugate Chemistry*, **13**, 757-765.

- 21) M.L. Immordino, P. Brusa, S. Arpicco, B. Stella, F. Dosio, L. Cattel (2003) "Preparation, characterization, cytotoxicity and pharmacokinetics of liposomes containing docetaxel" *Journal of Controlled Release*, **91**, 417-429.
- 22) L. Cattel, G. La Grotta, L. Infante, R. Passera, S. Arpicco, P. Brusa, C. Bumma (2003) "Pharmacokinetic study of oxaliplatin iv chronomodulated infusion combined with 5-fluorouracil iv continuous infusion in the treatment of advanced colorectal cancer" *Il Farmaco*, **58**, 1333-1338.
- 23) S. Arpicco, S. Canevari, M. Ceruti, E. Galmozzi, F. Rocco, L. Cattel (2004) "Synthesis, characterization and transfection activity of new saturated and unsaturated cationic lipids" *Il Farmaco*, **59**, 869-878.
- 24) M.L. Immordino, P. Brusa, F. Rocco, S. Arpicco, M. Ceruti, L. Cattel (2004) "Preparation, characterization, cytotoxicity and pharmacokinetics of liposomes containing gemcitabine prodrugs" *Journal of Controlled Release*, **100**, 331-346.
- 25) B. Stella, V. Marsaud, S. Arpicco, G. Géraud, L. Cattel, P. Couvreur, J.-M. Renoir (2007) "Biological characterization of folic acid-conjugated poly(H<sub>2</sub>NPEGCA-*co*-HDCA) nanoparticles in cellular models" *Journal of Drug Targeting*, **15**, 146-153.
- 26) I. Bravo-Osuna, D. Teutonico, S. Arpicco, C. Vauthier, G. Ponchel (2007) "Characterization of chitosan thiolation and application to thiol quantification onto nanoparticle surface" *International Journal of Pharmaceutics*, **340**, 173-181.
- 27) B. Stella, S. Arpicco, F. Rocco, V. Marsaud, J.-M. Renoir, L. Cattel, P. Couvreur (2007) "Encapsulation of gemcitabine lipophilic derivatives into polycyanoacrylate nanospheres and nanocapsules" *International Journal of Pharmaceutics*, **344**, 71-77.
- 28) G. Pasut, F. Canal, L. Dalla Via, S. Arpicco, F.M. Veronese, O. Schiavon (2008) "Antitumoral activity of PEG-gemcitabine prodrugs targeted by folic acid" *Journal of Controlled Release*, **127**, 239-248.
- 29) G. De Rosa, D. De Stefano, V. Laguardia, S. Arpicco, V. Simeon, R. Carnuccio, E. Fattal (2008) "Novel cationic liposome formulation for the delivery of an oligonucleotide decoy to NF-κB into activated macrophages" *European Journal of Pharmaceutics and Biopharmaceutics*, **70**, 7-18.
- 30) S. Taetz, A. Bochot, C. Surace, S. Arpicco, J.-M. Renoir, U. F Schaefer, V. Marsaud, S. Kerdine-Roemer, C.-M. Lehr, E. Fattal (2009) "Hyaluronic acid-modified DOTAP/DOPE liposomes for the targeted delivery of anti-telomerase siRNA to CD44-expressing lung cancer cells" *Oligonucleotides*, **19**, 103-115.
- 31) C. Surace, S. Arpicco, A. Dufay-Wojcicki, V. Marsaud, C. Bouclier, D. Clay, L. Cattel, J.-M. Renoir, E. Fattal (2009) "Lipoplexes targeting the CD44 hyaluronic acid receptor for efficient transfection of breast cancer cells" *Molecular Pharmaceutics*, **6**, 1062-1073.
- 32) F. Dosio, S. Arpicco, B. Stella, P. Brusa, L. Cattel (2009) "Folate mediate targeting of albumin conjugates of paclitaxel obtained through a heterogeneous phase system" *International Journal of Pharmaceutics*, **382**, 117-123.
- 33) G. Urbinati, D. Audisio, V. Marsaud, V. Plassat, S. Arpicco, B. Sola, E. Fattal, J.-M. Renoir (2010) "Therapeutic potential of new 4-hydroxy-tamoxifen-loaded pH-gradient liposomes in a multiple myeloma experimental model" *Pharmaceutical Research*, **27**, 327-339.
- 34) F. Dosio, B. Stella, S. Arpicco, L. Cattel (2011) "Macromolecules as taxane delivery systems" *Expert Opinion on Drug Delivery*, **8**, 33-55.
- 35) E. Dalla Pozza, M. Donadelli, C. Costanzo, T. Zaniboni, I. Dando, M. Franchini, S. Arpicco, A. Scarpa, M. Palmieri (2011) "Gemcitabine response in pancreatic adenocarcinoma cells is synergistically enhanced by dithiocarbamate derivatives" *Free Radical Biology and Medicine*, **50**, 926-933.
- 36) S. Arpicco, F. Dosio, B. Stella, L. Cattel (2011) "Anticancer prodrugs: an overview of major strategies and recent developments" *Current Topics in Medicinal Chemistry*, **11**, 2346-2381.
- 37) B. Stella, S. Arpicco, F. Rocco, S. Burgalassi, N. Nicosia, S. Tampucci, P. Chetoni, L. Cattel (2012) "Nonpolymeric nanoassemblies for ocular administration of acyclovir: pharmacokinetic evaluation in rabbits" *European Journal of Pharmaceutics and Biopharmaceutics*, **80**, 39-45.
- 38) A. Dufaÿ Wojcicki, H. Hillaireau, T.L. Nascimento, S. Arpicco, M. Taverna, S. Ribes, M. Bourge, V. Nicolas, A. Bochot, C. Vauthier, N. Tsapis, E. Fattal (2012) "Hyaluronic acid-bearing lipoplexes: physico-chemical characterization and in vitro targeting of the CD44 receptor" *Journal of Controlled Release*, **162**, 545-552.
- 39) F. Dosio, B. Stella B, A. Ferrero, C. Garino, D. Zonari, S. Arpicco, L. Cattel, S. Giordano, R. Gobetto (2013) "Ruthenium polypyridyl squalene derivative: A novel self-assembling lipophilic probe for cellular imaging" *International Journal of Pharmaceutics*, **440**, 221-228.

- 40) E. Dalla Pozza, C. Lerda, C. Costanzo, M. Donadelli, I. Dando, E. Zoratti, M.T. Scupoli, S. Beghelli, A. Scarpa, E. Fattal, S. Arpicco, M. Palmieri (2013) "Targeting gemcitabine containing liposomes to CD44 expressing pancreatic adenocarcinoma cells causes an increase in the antitumoral activity" *Biochimica et Biophysica Acta (BBA) - Biomembranes*, **1828**, 1396-1404.
- 41) S. Arpicco, G. De Rosa, E. Fattal (2013) "Lipid-based nanovectors for targeting of CD44-overexpressing tumor cells" *Journal of Drug Delivery*, Volume 2013, Article ID 860780, 8 pages.
- 42) S. Arpicco, B. Stella, O. Schiavon, P. Milla, D. Zonari, L. Cattel (2013) "Preparation and characterization of novel poly(ethylene glycol) paclitaxel derivatives" *International Journal of Pharmaceutics*, **454**, 653-659.
- 43) S. Arpicco, C. Lerda, E. Dalla Pozza, C. Costanzo, N. Tsapis, B. Stella, M. Donadelli, I. Dando, E. Fattal, L. Cattel, M. Palmieri (2013) "Hyaluronic acid-coated liposomes for active targeting of gemcitabine" *European Journal of Pharmaceutics and Biopharmaceutics*, **85**, 373-380.
- 44) F. Dosio, B. Stella, S. Cerioni, D. Gastaldi, S. Arpicco (2014) "Advances in anticancer antibody-drug conjugates and immunotoxins" *Recent Patents on Anticancer-Drug Discovery*, **9**, 35-65.
- 45) P. Milla, C. Fiorito, F. Soria, S. Arpicco, L. Cattel, P. Gontero (2014) "Intravesical thermo-chemotherapy based on conductive heat: a first pharmacokinetic study with Mitomycin C in superficial transitional cell carcinoma patients" *Cancer Chemotherapy and Pharmacology*, **73**, 503-509.
- 46) S. Arpicco, P. Milla, B. Stella, F. Dosio (2014) "Hyaluronic acid conjugates as vectors for the active targeting of drugs, genes and nanocomposites in cancer treatment" *Molecules*, **19**, 3193-3230.
- 47) I. Pedrini, E. Gazzano, K. Chegaev, B. Rolando, A. Marengo, J. Kopecka, R. Fruttero, D. Ghigo, S. Arpicco, C. Riganti (2014) "Liposomal nitrooxy-doxorubicin: one step over Caelyx® in drug-resistant human cancer cells" *Molecular Pharmaceutics*, **11**, 3068-3079.
- 48) S. Valetti, S. Mura, M. Noiray, S. Arpicco, F. Dosio, J. Vergnaud, D. Desmaele, B. Stella, P. Couvreur (2014) "Peptide conjugation: before or after nanoparticle formation?" *Bioconjugate Chemistry*, **11**, 1971-1983.
- 49) T.L Nascimento, H. Hillaireau, M. Noiray, V. Bourgaux, S. Arpicco, G. Pehau-Arnaudet, M. Taverna, D. Cosco, N. Tsapis, E. Fattal E (2015) "Supramolecular organization and siRNA binding of hyaluronic acid-coated lipoplexes for targeted delivery to the CD44 receptor" *Langmuir*, **31**, 11186-11194.
- 50) F. Dosio, S. Arpicco, B. Stella, E. Fattal (2016) "Hyaluronic acid for anticancer drug and nucleic acid delivery" *Advanced Drug Delivery Reviews*, **97**, 204-236.
- 51) S. Arpicco, L. Battaglia, P. Brusa, R. Cavalli, D. Chirio, F. Dosio, M. Gallarate, P. Milla, E. Peira, F. Rocco, S. Sapino, B. Stella, E. Ugazio, M. Ceruti (2016) "Recent studies on the delivery of hydrophilic drugs in nanoparticulate systems" *Journal of Drug Delivery Science and Technology*, **32**, 298-312.
- 52) M. Costanzo, F. Carton, A. Marengo, G. Berlier, B. Stella, S. Arpicco, M. Malatesta (2016) "Fluorescent and electron microscopy to visualize the intracellular fate of nanoparticles for drug delivery" *European Journal of Histochemistry*, **60**: 2640:107-115.
- 53) A. Malfanti, I. Miletto, E. Bottinelli, D. Zonari, G. Blandino, G. Berlier, S. Arpicco (2016) "Delivery of gemcitabine prodrugs employing mesoporous silica nanoparticles" *Molecules*, **21**, 522.
- 54) M. Costanzo, L. Scolaro, G. Berlier, A. Marengo, S. Grecchia, C. Zancanaro, M. Malatesta, S. Arpicco (2016) "Cell uptake and intracellular fate of phospholipidic manganese-based nanoparticles" *International Journal of Pharmaceutics*, **508**, 83-91.
- 55) T. Leite Nascimento, H. Hillaireau, J. Vergnaud, M. Rivano, C. Deloménie, D. Courilleau, S. Arpicco, J.S. Suk, J. Hanes, E. Fattal (2016) "Hyaluronic acid-conjugated lipoplexes for targeted delivery of siRNA in a murine metastatic lung cancer model" *International Journal of Pharmaceutics*, **514**, 103-111.
- 56) D. Cosco, N. Tsapis, T. L. Nascimento, M. Fresta, D. Chapron, M. Taverna, S. Arpicco, E. Fattal (2017) "Polysaccharide-coated liposomes by post-insertion of a hyaluronan-lipid conjugate" *Colloids and Surfaces B: Biointerfaces*, **158**, 119–126.
- 57) G. Fumagalli, B. Stella, I. Pastushenko, F. Ricci, M.S. Christodoulou, G. Damia, D. Mazza, S. Arpicco, C. Giannini, L. Morosi, F. Dosio, P.A. Sotiropoulou, D. Passarella (2017) "Heteronanoparticles by self-assembly of doxorubicin and cyclopamine conjugates" *ACS Medicinal Chemistry Letters*, **8**, 953-957.
- 58) L. Accomasso, I. Miano, T. Cocca, M. Bigliati, S. Arpicco, A. Barge (2017) "Efficacy of a topical lotion containing lactoferricin, glycerophosphoinositol lysine and verbascoside for external otitis due to atopic dermatitis" *Clinical Dermatology Research Journal*, 2(1).

- 59) P. Milla, M. L. Viterbo, S. Mosca, S. Arpicco (2018) "Chemical and microbiological stability, anticoagulant efficacy and toxicity of 35 and 90 mM trisodium citrate solutions stored in plastic syringes" *European Journal of Hospital Pharmacy*, **25**(e2), e83-e87.
- 60) S. Franzé, A. Marengo, B. Stella, P. Minghetti, S. Arpicco, F. Cilurzo (2018) "Hyaluronan-decorated liposomes as drug delivery systems for cutaneous administration" *International Journal of Pharmaceutics*, **535**, 333-339.
- 61) E. Gazzano, B. Rolando, K. Chegaev, I. C. Salaroglio, J. Kopecka, I. Pedrini, S. Saponara, M. Sorge, I. Buondonno, B. Stella, A. Marengo, M. Valoti, M. Brancaccio, R. Fruttero, A. Gasco, S. Arpicco, C. Riganti (2018) "Folate-targeted liposomal nitrooxy-doxorubicin: an effective tool against P-glycoprotein-positive and folate receptor-positive tumors" *Journal of Controlled Release*, **270**, 37-52.
- 62) V. Ricci, D. Zonari, S. Cannito, A. Marengo, M. T. Scupoli, M. Malatesta, F. Carton, F. Boschi, G. Berlier, S. Arpicco (2018) "Hyaluronated mesoporous silica nanoparticles for active targeting: influence of conjugation method and hyaluronic acid molecular weight on the nanovector properties" *Journal of Colloid and Interface Science*, **516**, 484-497.
- 63) L. Massaad-Massade, S. Boutary, M. Caillaud, C. Gracia, B. Parola, S. Bel Gnaouiya, B. Stella, S. Arpicco, E. Buchy, D. Desmaële, P. Couvreur, G. Urbinati (2018) "New formulation for the delivery of oligonucleotides using "clickable" siRNA-polyisoprenoid-conjugated nanoparticles: application to cancers harboring fusion oncogenes" *Bioconjugate Chemistry*, **29**, 1961-1972.
- 64) E. Peretti, I. Miletto, B. Stella, F. Rocco, G. Berlier, S. Arpicco (2018) "Strategies to obtain encapsulation and controlled release of pentamidine in mesoporous silica nanoparticles" *Pharmaceutics*, **10**(4), 195.
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- 67) V. Guglielmi, F. Carton, G. Vattemi, S. Arpicco, B. Stella, G. Berlier, A. Marengo, F. Boschi, M. Malatesta (2019) "Uptake and intracellular distribution of different types of nanoparticles in primary human myoblasts and myotubes" *International Journal of Pharmaceutics*, **560**, 347-356.
- 68) E. Gazzano, I. Buondonno, A. Marengo, B. Rolando, K. Chegaev, J. Kopecka, S. Saponara, M. Sorge, C. M. Hattinger, A. Gasco, R. Fruttero, M. Brancaccio, M. Serra, B. Stella, E. Fattal, S. Arpicco, C. Riganti (2019) "Hyaluronated liposomes containing H<sub>2</sub>S-releasing doxorubicin are effective against P-glycoprotein-positive/doxorubicin-resistant osteosarcoma cells and xenografts" *Cancer Letters*, **456**, 29-39.
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- 71) B. Stella B, I. Andreana, D. Zonari, S. Arpicco (2020) "Pentamidine-loaded lipid and polymer nanocarriers as tunable anticancer drug delivery systems" *Journal of Pharmaceutical Sciences*, **109**, 1297-1302.
- 72) M. d'Amora, A. Camisasca, A. Boarino, S. Giordani, S. Arpicco (2020) "Supramolecular functionalization of carbon nano-onions with hyaluronic acid-phospholipid conjugates for selective targeting of cancer cells" *Colloids and Surfaces B: Biointerfaces*, **11**, 110779.
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- 74) Z. Ricci, S. Benegni, J.J. Cies, E. Marinari, R. Haiberger, C. Garisto, A. Rizza, C. Giorni, L. Di Chiara, S. Arpicco, E. Muntoni, F. Ferrari, P. Milla (2020) "Population pharmacokinetics of cefoxitin administered for pediatric cardiac surgery prophylaxis" *The Pediatric Infection Disease Journal*, **39**, 609-614.

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- 77) F. Bosca, I. Corazzari, F. Foglietta, R. Canaparo, G. Durando, L. Pastero, S. Arpicco, F. Dosio, D. Zonari, G. Cravotto, S. Tagliapietra, L. Serpe, F. Turci, A. Barge (2020) "SWCNT-porphyrin nano-hybrids selectively activated by ultrasound: an interesting model for sonodynamic applications" *RSC Advances*, **10**, 21736–21744.
- 78) F. Bosca, F. Foglietta, A. Gimenez, R. Canaparo, G. Durando, I. Andreana, A. Barge, E. Peira, S. Arpicco, L. Serpe, B. Stella (2020) "Exploiting lipid and polymer nanocarriers to improve the anticancer sonodynamic activity of chlorophyll" *Pharmaceutics* **12**, 605.
- 79) M.E. Cano, D. Lesur, V. Bincoletto, E. Gazzano, B. Stella, C. Riganti, S. Arpicco, J. Kovensky (2020) "Synthesis of defined oligohyaluronates-decorated liposomes and interaction with lung cancer cells" *Carbohydrate Polymers*, **48**, 116798.
- 80) F. Masetto, K. Chegaev, E. Gazzano, N. Mullappilly, B. Rolando, S. Arpicco, R. Fruttero, C. Riganti, M. Donadelli (2020) "MRP5 nitration by NO-releasing gemcitabine encapsulated in liposomes confers sensitivity in chemoresistant pancreatic adenocarcinoma cells" *BBA - Molecular Cell Research*, **1867**, 118824.
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