

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

## Curriculum Vitae et studiorum Prof. Stefano Leporatti, PhD

*Stefano Leporatti was among **pioneers** in Italy in the **Scanning Force Microscopy (SFM)** field since he started working as one of the first Digital Instruments (now Veeco Instruments) SFM user April 1993 when only few italian groups were dealing with commercial SFM and he was among **pioneers** also of the polyelectrolyte layer-by-layer (LbL) assembly of **micro- and nanocapsules** a nanotechnology method which, after first papers in 1998, was followed by many hundred publications by researchers all over the world. LbL nanoassembly of polyelectrolytes nanocapsules has already found industrial applications like drug delivery, sustained release, cancer drug nanocarriers and others.*

*Stefano Leporatti published **270+ Publications** (**140+** in **Peer Reviewed papers**, **4 book chapters**-including **4 invited Review**-) on biophysical and physical chemistry nanostructures. He has participated to **130+ Conferences\Workshops** and has given **40+ invited talks**. He is Reviewer of **130+ Peer Reviewed Journals** such as: Chemical Physics Letters, Synthetic Metals, Langmuir, Nanotechnology, International Journal of Polymer Science, J. of Biomechanics, Acta Biomaterialia, Nanomedicine (Future Medicine), ACS Nano, Biomacromolecules, Bioinorganic Chemistry and Applications, ACS Applied Materials and Interfaces Expert Opinion on Drug Delivery, Bioinorganic Chemistry and Applications, Journal of Colloid and Interface Science, Drug Delivery Letters, Current Pharmaceutical Design, Nanoscale, J. Controlled Release, Scientific Reports, National Projects **Reviewer** (FIRB; PRIN) for Italian Ministry of University and Research (MIUR), FCT - Fundação para a Ciência e a Tecnologia, (CNR Portugais) Project **Referee** (since 2012) and many others.*

*Leporatti's **total citation index** is **6,000+** with an **average number of citations per Items 40+**, **average number of citations per Year 40+** and a **h-index** of **37** (ISI web of Science, update March 2025).*

*Stefano Leporatti has been **Coordinator of Progetto Bilaterale Italia-Portogallo** “Nanocapsule e nanoparticelle per il delivery controllato di Beta-Sheet Breaker Peptides” (Accordo di Cooperazione scientifica tra il CNR e la FCT) with Prof. Manuel Coelho (Department of Chemical Engineering, Porto University, Portugal) (2009-2010)*

*Stefano Leporatti has been **Coordinator of Progetto Bilaterale di Grande Rilevanza Italia-USA (2009-2011)**, “Nanocarriers for Cancer Therapy” selected (within best 20) between 400 applications for financing from Italian Ministero degli Affari Esteri (MAE) in April 2008.*

*Stefano Leporatti has been **CNR-Nano Responsabile of Progetto** Marie Curie Initial Training Networks (ITN) "Strategy to Inhibit TGF- $\beta$ 1 in liver disease (IT-Liver)" (2012-2016) Coordinator: Dr. Isabel Fabregat, (IDBELL, Madrid, Spain), Call: FP7-PEOPLE-2012-ITN.*

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901



## STEFANO LEPORATTI

Born: **Rapallo (Genova) –Italy, November 17<sup>th</sup>, 1967.**  
Work address: **CNR-NANOTEC, Istituto di Nanotecnologia**  
**Polo di Nanotecnologia clo Campus Ecotekne, Via Monteroni,**  
**73100 Lecce (Italy)**  
Ph: **+39 0832 3 19829**  
Fax: **+39 0832 3 19901**  
email: [stefano.leporatti@unisalento.it](mailto:stefano.leporatti@unisalento.it), [stefano.leporatti@nanotec.cnr.it](mailto:stefano.leporatti@nanotec.cnr.it)  
web page: [www.nanotec.cnr.it](http://www.nanotec.cnr.it)  
ORCID iD: [orcid.org/0000-0001-5912-7565](http://orcid.org/0000-0001-5912-7565)  
Web of Science ResearcherID: E-1597-2011  
Scopus Author ID: 6603690329  
Publons: <https://publons.com/researcher/880659/stefano-leporatti/>  
Google Scholar: <https://scholar.google.it/citations?user=Zcl1tcIAAAAJ&hl=it>  
Linkedin: <https://www.linkedin.com/in/stefano-leporatti-161ab420/>  
Researchgate: [https://www.researchgate.net/profile/Stefano\\_Leporatti](https://www.researchgate.net/profile/Stefano_Leporatti)  
Loop: <https://loop.frontiersin.org/people/123280/overview>  
Facebook: <https://it-it.facebook.com/stefano.leporatti.5>  
Twitter: <https://twitter.com/LepoStefano>  
Instagram: <https://bigsta.net/account/stefano.leporatti.5/>  
SciProfile: <https://sciprofiles.com/profile/150172>  
[https://topitalianscientists.org/tis/51231/Stefano\\_Leporatti\\_-\\_Top\\_Italian\\_Scientists\\_in\\_Material\\_&\\_Nano\\_Sciences](https://topitalianscientists.org/tis/51231/Stefano_Leporatti_-_Top_Italian_Scientists_in_Material_&_Nano_Sciences)

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

## **Curriculum Vitae et studiorum** **Prof. Stefano Leporatti, Ph.D**

### **Work Experience**

(October-November 2022) Visiting Scientist @ Department of Nanobiotechnology, Institute for Biophysics @ BOKU (University of Natural Resources and Life Sciences) Vienna (Austria)

(January-February 2018) Visiting Scientist @ Department of Nanobiotechnology, Institute for Biophysics @ BOKU (University of Natural Resources and Life Sciences) Vienna (Austria)

(October-November 2014) Visiting Scientist @ Methodist Hospital Research Institute, Department of Nanomedicine, Houston, TX (USA)

(September 2012- present) Lecturer @ UniSalento for Nanotechnology and Nanoscience

- 2009 Visiting Scientist @ Institute for Micromanufacturing, (IfM) Louisiana Tech University, Ruston Louisiana (USA)

- 1<sup>st</sup> -30<sup>th</sup> June 2024 Visiting Professor @ Department of Nanobiotechnology, Institute for Biophysics @ BOKU (University of Natural Resources and Life Sciences) Vienna (Austria).

(May 2006 - 27<sup>th</sup> December 2018):

**Fixed-term CNR Senior Researcher (“Primo Ricercatore CNR, Associate Professor Equivalent.”) @ CNR NANOTEC in Lecce, NanoCarriers and BioMechanics Group Leader**

[www.nanotec.cnr.it](http://www.nanotec.cnr.it)

(27<sup>th</sup> December 2018-15<sup>th</sup> October 2020):

**Permanent CNR Senior Researcher (“Primo Ricercatore CNR, Associate Professor Equivalent.”) @ CNR NANOTEC in Lecce, NanoCarriers and BioMechanics Group Leader**

(15<sup>th</sup> October 2020-Present)

**CNR Research Director (“Dirigente di Ricerca CNR, Full Professor Equivalent.”) @ CNR NANOTEC in Lecce and NanoCarriers and BioMechanics Group Leader**

### **Projects/Research Fields:**

1. *Morphostructural Studies by means of Bio-AFM of living (in cultured medium and in vital condition) and fixed cells (in air and in liquid).*
2. *Nanomechanical investigation of cells elasticity (i.e. tumoral, stem, neuronals) by means of force mapping (Force Volume) and their analysis by dedicated theoretical models.*
3. *Investigation of cellular morphology by means of Confocal Microscopy (imaging) on fixed (and living) cells with single and multilabelling fluorescence.*
4. *Engineering Microenvironment by Layer by Layer (LbL) biocomposites films for breast cancer cells controlled growth: Morphostructure and Cytomechanics study.*

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

5. *Morfostructural Characterization and elasticity study on single cell level (by AFM) in cultured cancer(stem) cells during differentiation before and after treatment with natural antioxidant molecules (polyphenols)*
6. *Development of Nano and Microcapsules of biocompatible\degradable polyelectrolyte multilayers for encapsulation of low solubility drugs and for intracellular controlled delivery.*
7. *Development and Characterization of Nanocarriers produced by LbL encapsulation for studying uptake in cancer cells with application in novel therapies against Cancer.*  
**Progetto Bilaterale di Grande Rilevanza Italia-USA**, “*Nanocarriers for Cancer Therapy*” from Italian Ministero degli Affari Esteri (MAE) (ITA Coordinator **Dr. Stefano Leporatti**, USA Coordinator **Prof. Yuri M. Lvov**, Institute of Micromanufacturing (IfM) Louisiana Tech. University, Ruston, Louisiana).
8. *Development, characterisation and antineoplastic drug-encapsulation of Halloysite Nanotubes for delivery into Cancer Cells in collaboration with **Prof. Yuri M. Lvov**, Institute of Micromanufacturing (IfM) Louisiana Tech. University, Ruston, Louisiana (USA) (2008-2011).*
9. *Production and characterization of "Nanocapsule e nanoparticelle per il delivery controllato di Beta-Sheet Breaker Peptides" in collaboration with **Prof. Manuel Coelho** (Department of Chemical Engineering, Porto University, Portugal) through "Accordo di Cooperazione scientifica tra il CNR e la FCT " (2009-2010).*

(August 2001-April 2006):

**Research Scientist (Wissenschaftlicher Mitarbeiter) @Leipzig University, Institute of Medical Physics & Biophysics, Härtelstrasse 16/18, 04107 Leipzig (Germany) (Group of Prof. Dr. E. Donath)**

[www.uni-leipzig.de](http://www.uni-leipzig.de)

**Projects/Research Fields:**

- 1) “*Interaction Forces between Cellulose Microspheres and Ultrathin Cellulose Films Monitored by Colloidal Probe Microscopy –Screening of Potential Wet Strength Agents for Improving Functional Tissues Properties*”
- 2) “*Colloidal Force Microscopy Studies by means of Polyelectrolyte and Lipid Coated Colloidal Particles Modified Atomic Force Microscopy Microcantilevers*”
- 3) “*Colloidal Probe Microscopy Investigation of Viscoelastic and Mechanical Properties of Macrophages upon Lipopolysaccharide Stimulation*”

(February 2001- July 2001):

**Application Engineer @Digital Instruments/Veeco Metrology Group (now Veeco Instruments), Janderstrasse 9, 68199 Mannheim (Germany)**

[www.veeco.com](http://www.veeco.com)

**Activities/Function:** Responsible in the field of Life Science and Biology for Contact and Demonstration for Customers in- and out -house and at National and International Conferences and Meetings of the following types of **Atomic Force Microscopies** by Digital Instruments/Veeco Metrology Group: Multimode™, Dimension 3100™, Bioscope™ I.

(February 1999- February 2001):

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**Postdoc @Max-Planck-Institute of Colloids and Interfaces (Supervisor Prof. Dr. H. Möhwald)**

<http://www.mpg.de/>

**Projecs/Research Field:**

“Scanning Force Microscopy Investigation of Multicomposite Polyelectrolyte Multilayered Micro- and Nanocapsules”

**Am Mühlenberg 1, Max Planck Campus D-14424 Golm/Potsdam. Germany.**

(November 1995-February 1999)

**Ph.D (Doctor Rerum Naturalium, Dr. Rer. Nat. mark: Cum Laude) in Solid State Physics (“Festkörper Physik”), @ Max Planck Institute of Colloids and Interfaces and University of Postdam (Germany) Defence date: July 1<sup>st</sup>, 1999.**

[www.uni-potsdam.de](http://www.uni-potsdam.de)

“Morphological Investigations of structural changes in Phospholipid monolayers induced by transfer from water onto solid substrates”

**Supervisor: Prof. Dr. Helmuth Möhwald (Referees: H. Möhwald, G. Brezesinski, R. Rolandi)**

(March 1995-October 1995)

**Postgraduate Researcher @ Genoa University (Dr. A. Diaspro, Prof. R. Rolandi)  
Department of Physics Via Dodecaneso 3, 16146 Genoa (Italy).**

[www.unige.it](http://www.unige.it)

**Projecs/Research Field:**

“ Scanning Force Microscopy and Confocal Microscopy Investigation of Biological Samples ”

**Collaborations:**

1. Max Planck Institute of Colloids and Intefaces, Potsdam (Germany) (Prof. Dr. Helmuth Mohwald, 1946-2018)
2. Leipzig University, Institute of Medical Physics and Biophysics (Prof. Dr. Edwin Donath).
3. Istituto Nazionale Tumori, Milano (Dr. Marco Pierotti, Scientific Director).
4. University of Milan, Immunology and Istituto Nazionale Tumori, Milano (Prof. Andrea Balzari).
5. Università di Torino, CERMS, Laboratorio di Immunolgia dei Tumori (Prof. Franco Novelli).
6. Policlinico di Bari, Medicina Interna, Università di Bari (Prof. Gianluigi Giannelli).
7. Medestea Spa , Valenzana (Bari) (Dr. Luigi Balducci).
8. Università del Salento, Facoltà di Ingegneria dell'Innovazione, Lecce (Prof. Ludovico Valli).
9. Università del Salento, Dipartimento di Biologia e Scienze e Tecnologie Ambientali (DISTEBA), Lecce (Prof. Michele Maffia)
10. University of Porto, Department of Chemical Engineering, Porto (Portugal) (Prof. Manuel Coelho).
11. Institute for Micromanufacturing, (IfM) Louisiana Tech University, Ruston Louisiana (USA) (Prof. Yuri M. Lvov)
12. Houston Methodist Research Institute, Houston (USA)(Prof. Mauro Ferrari)

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

13. Prof. A. M. Safer Head of Nanoscopy Science Center - NSC Faculty of Science, Kuwait University, Kuwait City, Kuwait.
14. Leibniz-Institut für Polymerforschung Dresden e.V., Dresden (Germany) (PD Dr. Martin Müller).
15. Fachbereich Physik, Philipps Universität Marburg, Marburg, Germany (Prof. Wolfgang Parak).
16. University of Granada, Departamento de Farmacia y Tecnología Farmacéutica (Prof. César Viseras Iborra).
17. Faculty of Medicine, Cairo University, Department of Medical Biochemistry and Molecular Biology, Cairo (Egypt) (Prof. Hanan Hassan Ahmed)
18. Medical Research Center – Faculty of Medicine- Ain Shams University, Abbassia, Cairo, Egypt (Dr. Abu Zahra Fatma Abd-elkarim)
19. Faculty of Science, Molecular Biology of Kuwait University, Kuwait (Dr. Mohamed Salah Abaza).
20. Istituto de Quimica, Universidad Autonoma de Mexico, Mexico City (Dr. Hector Vladiu)
21. Center for Integrative Biology (CIBIO), Trento (Italy) (Prof. Alberto Inga)
22. Department of Microbiology, Kazan Federal University, Kazan, Republic of Tatarstan, Russian Federation (RF) (Prof. Rawil F. Fakhrullin).
23. Università del Salento, Dipartimento di Biologia e Scienze e Tecnologie Ambientali (DISTEBA), Lecce (Dr. Elisa Panzarini).
24. Dipartimento di Biologia e Biotecnologie "Charles Darwin", Università La Sapienza di Roma, Roma (Italy) (Prof. Luciana Dini)
25. National Institute of Gastroenterology "S. De Bellis" Research Hospital, Castellana Grotte (BA) (Prof. Gianluigi Giannelli, Scientific Director).

#### **Other Activities:**

1. Chairman-Session "Biopolymer –Clay Nanocomposites for Medicinal Uses" at **4th International Conference on Medical Geology Geological and Medical Sciences for a safer Environment**, Bari, Italy September 20-25, 2011.
2. Co-Chairman "Omics Meet Translational research " Session-**Proteomics and Metabolomics** Workshop organized by the Marie Curie ITN action "ITLiver", IDIBELL and the Societat Catalana de Biologia (SCB) Barcelona, 25th-26th September 2013.
3. Co-Chairman IT-LIVER Workshop: "3-Dimensional Cell Cultures and Drug Discovery" Session-**Preclinical Drug Application in 3D** Wien 27th- 28th February 2014.
4. Co-Chairman Session- Nanomaterials NM2- "Functional polymeric composites with nanoclays „**AMAM 2015 Applied Mineralogy & Advanced Materials International Conference** Castellaneta Marina, Italy, June 7-12, 2015.
5. Chairman-Session II "New Nanotechnological Tools for Research and Therapy " Workshop "Liver, Methabolic Disorders, Lifestyles" of the **50th Annual Scientific Meeting of the European Society for Clinical Investigation (ESCI)**" Paris, 27-28 April 2016.
6. Chairman-Session D8 "Clay and Health: from pelotherapy to drug delivery" @ "**Euroclay 2019" International Conference on Clay Science and technology**, Paris, 01<sup>st</sup> -05<sup>th</sup> July 2019.
7. Chairman of **International PhD School of Medical Bionanotechnology and Nanomedicine, 1<sup>st</sup> Edition (InterNanoBioMed@Nanotec)** @ CNR Nanotec. Via

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

Monteroni, Lecce (Italy), 5 October 2023. (Co-Chaired with Prof. Dr. José Toca-Herrera, Biophysics Institute Director @ BOKU University, Vienna (Austria).

8. Chairman of **International PhD School of Medical Bionanotechnology and Nanomedicine, 2<sup>nd</sup> Edition (InterNanoBioMed@Nanotec)** @ CNR Nanotec. Via Monteroni, Lecce (Italy) 3-4 October 2024 (Co-Chaired with Prof. Dr. José Toca-Herrera, Biophysics Institute Director @ BOKU University, Vienna (Austria). (*In Lovely Memory of Prof. Giacinto Scolos (1935-2024)*)).

### **Teaching:**

**Private Lessons** of Mathematics and Physics for Undergraduate and Graduate students (Genoa University) in Italian Language.

**2001**

**Seminars** (Physics Exercises relevant for Medicine and Biophysics) and **Practika** (Physics Laboratory experiences for Medicine and Biophysics) for Medical and Toothmedical Faculty Students (Leipzig University, Medical Faculty) in German language.

**2006**

**Seminar** "Nanoengineered Colloids and Capsules for Drug Delivery and Diagnostics" for Biotechnology Students of Salento University, in Italian Language.

**2011**

**Lessons** at Biotechnology Faculty, University of Salento "Nanocarriers and NanoBiofarmaceuticals", in Italian Language.

**Lessons** for Master Students of "Master in NanoBiotechnology", Biotechnology Faculty, University of Bari, in Italian Language.

**2012**

**Lectures and Laboratory experiences** at Science Faculty of Kuwait University, 22<sup>th</sup> -24<sup>th</sup> April 2012 Seminars & Workshop titled: "Using AFM and LSCM application to the sciences" in English language

1<sup>st</sup> Lecture: „Scanning Force Microscopy (SFM): principles and applications on living cells“

2<sup>nd</sup> Lecture: „Confocal Laser Scanning Microscopy (LSCM): principles and applications on biological entities“

3<sup>rd</sup> Lecture: „The Cell: Structure and Complexity“

**Lectures and Practical Experiences** at Università del Salento, Engineering Faculty, September 2012-September 2014, in English Language

1. Characterisation Techniques: Atomic Force Microscopy, Electron Microscopy, Micronanalysis, Two Photon Confocal Microscopy
2. Techniques of Biofunctionalisation and synthesis of colloidal micro and nanoparticles
3. Marketing and communication in nanobiotechnology
4. Nanomedicine: ethical issues and nanotoxicology

**Lectures and Practical Experiences** „ Nanotecnologie per la Salute con dimostrazione di esperimenti di laboratorio“ in the framework of „ Progetto Formativo PON Scuole @ NNL-Istituto Nanoscience, CNR“ Soggetto capofila Liceo Scientifico „ Ilaria Alpi“ Rutigliano (BA)

#### **Modulo 2: Microscopia a Scansione di Sonda e Confocale**

**Contents:**

- 1) Microscopia a Scansione di Sonda e a Scansione Laser Confocale- (parte teorica)- durata **5 hours**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- a) Elementi di Microscopia a Scansione di Forza, Modalità Tapping, Modalità Contact, Nuove Tecniche di microscopia (Peak Force Tapping, Force Volume Imaging, Force Modulation)
- b) Elementi di microscopia a scansione Laser, microscopia confocale a singolo fotone, microscopia a due fotoni, Time Lapse Microscopy, FLIM, TIRF
- 2) Caratterizzazione morfologica e meccanica di biomateriali e cellule; (parte pratica) - durata **5 hours**
- 3) Caratterizzazione ottica di campioni di interesse biomedico: (parte pratica) -durata **5 hours**

**Lectures for PhD Courses in Physics and Nanoscience (September 2014-June 2015)**

**Module I: Nanoscience and Nanomedicine (III CFD, 15 hours)**

Nanomedicine (5 hours)  
Drug Delivery Systems (DDS) (5 hours)  
Pharmacokinetic and Nanotoxicology (5 hours)  
Techniques of Bio-funzionalization and Synthesis of Nano e Micro Colloidal Particles (4 hours)

**Module II: Characterisation and analysis Techniques (III CFD, 15 Hours)**

Atomic Force Microscopy (5 hours)  
Laser Scanning Confocal Microscopy (5 hours)  
Fluorescence Microscopy (5 hours)

**Lectures for PhD Courses in Physics and Nanoscience (June 2015-December 2015)**

**Nanomedicine and Characterisation and analysis Techniques (IV CFD, 20 Hours)**

Nanomedicine (2 hours)  
Drug Delivery Systems (DDS) (4 hours)  
Pharmacokinetic and Nanotoxicology (2 hours)  
Techniques of Bio-funzionalization of Nano e Micro Colloidal Particles (2 hours)  
Atomic Force Microscopy (4 hours)  
Laser Scanning Confocal Microscopy (4 hours)  
Fluorescence Microscopy (2 hours)

2015

**Lectures and Laboratory experiences** at Science Faculty of Kuwait University, 9th March 2015 Workshop titled: „Nanoscopy and Scientific Applications in Material and Biological Sciences“ in English language. 1<sup>st</sup> Lecture: „Atomic Force Microscopy“ (1hour) 2<sup>nd</sup> Lecture: „Atomic Force Microscopy Application,, (1 hour)

**Lectures for PhD Students Formation Activating MAAT@ Distretto Tecnologico (DHITECH), University of Salento clo Campus Ekotekne 30th-31th April 2015 (12 hours: 8 hours frontal lessons, 4 hours preparation)**

„Applicazioni delle Nanotecnologie alle Neuroscienze " (4 hours)  
„Applicazioni delle Nanotecnologie alla Nanomedicina " (4 hours)

2016

**Lectures for PhD Courses in Physics and Nanoscience (June 2016-July 2016)**

**Nanomedicine and Characterisation and analysis Techniques (IV CFD, 20 Hours)**

Nanomedicine (4 hours)

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**Drug Delivery Systems (DDS) (4 hours)**

**Techniques of Bio-funzionalization of Nano e Micro Colloidal Particles (2 hours)**

**Atomic Force Microscopy (4 hours)**

**Laser Scanning Confocal Microscopy (4 hours)**

**Fluorescence Microscopy (2 hours)**

**2017**

**Lectures for PhD Courses in Physics and Nanoscience (May 2018-June 2018)**

**Nanomedicine and Characterisation and analysis Techniques (IV CFD, 20 Hours)**

Nanomedicine (4 hours)

Drug Delivery Systems (DDS) (4 hours)

Techniques of Bio-funzionalization of Nano e Micro Colloidal Particles (2 hours)

Atomic Force Microscopy (4 hours)

Laser Scanning Confocal Microscopy (4 hours)

Fluorescence Microscopy (2 hours)

**2018**

**Lectures and Laboratory experiences** at Science Faculty of Kuwait University, 05<sup>th</sup> -11<sup>th</sup> November 2018. Seminars & Workshop titled: "Nanoworkshop" in English language

1<sup>st</sup> Lecture: „Colloidal Particles“ (1hour)

2<sup>nd</sup> Lecture: "Drug Delivery" (1hour)

Laboratory Experiences: "Preparations and Characterisation of Gold and Chitosan nanoparticles"

**2019**

**Lectures for PhD Courses in Physics and Nanoscience (May 2019-June 2019)**

**Nanomedicine and Characterisation and analysis Techniques (IV CFD, 20 Hours)**

Nanomedicine (4 hours)

Drug Delivery Systems (DDS) (4 hours)

Techniques of Bio-funzionalization of Nano e Micro Colloidal Particles (2 hours)

Atomic Force Microscopy (4 hours)

Laser Scanning Confocal Microscopy (4 hours)

Fluorescence Microscopy (2 hours)

**2020**

**Lectures for PhD Courses in Physics and Nanoscience and (April 2020-May 2020) (Due to COVID-19 Outbreak, the lesssons were delivered telematically by using Teams Microsoft Platform)**

**Nanomedicine and Characterisation and analysis Techniques (IV CFD, 20 Hours)**

Nanomedicine (4 hours)

Drug Delivery Systems (DDS) (4 hours)

Colloidal Particles (4 hours)

Atomic Force Microscopy (4 hours)

Laser Scanning Confocal Microscopy (4 hours)

**2021**

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**Lectures for PhD Courses in Physics and Nanoscience and (June 2021-July 2021) (Due to COVID-19 Outbreak, the lessons were delivered telematically by using Teams Microsoft Platform)**

**Nanomedicine and Characterisation and analysis Techniques (IV CFD, 20 Hours)**

Nanomedicine (4 hours)  
Drug Delivery Systems (DDS) (4 hours)  
Colloidal Particles (4 hours)  
Atomic Force Microscopy (4 hours)  
Laser Scanning Confocal Microscopy (4 hours)

2022

**Lectures for PhD Courses in Physics and Nanoscience and (May 2022-June 2022) (Still due to COVID-19 restrictions, the lesssons were streamed by using Teams Microsoft Platform)**

**Nanomedicine and Characterisation and analysis Techniques (IV CFD, 20 Hours)**

Nanomedicine (4 hours)  
Drug Delivery Systems (DDS) (4 hours)  
Colloidal Particles (4 hours)  
Atomic Force Microscopy (4 hours)  
Laser Scanning Confocal Microscopy (4 hours)

2023

**Lectures for PhD Courses in Physics and Nanoscience and (June 2023-July 2023) (the lesssons were held either in hybrid modality: in presence and streamed by using Teams Microsoft Platform)**

**Nanomedicine and Characterisation and analysis Techniques (IV CFD, 20 Hours)**

Nanomedicine (4 hours)  
Drug Delivery Systems (DDS) (4 hours)  
Colloidal Particles (4 hours)  
Atomic Force Microscopy (4 hours)  
Laser Scanning Confocal Microscopy (4 hours)

- **National Scientific Qualification (Abilitazione Scientifica Nazionale) to function as a Associate Professor in the Italian Universities for the Academic Sector 02/B3: Applied Physics. (27/12/2013 - 11/12/2024)**

**Judgment:** L'analisi collegiale del curriculum vitae, della lista delle pubblicazioni e dei titoli, del candidato Leporatti Stefano, evidenzia una eccellente attività di ricerca, afferente al settore concorsuale 02/B3. Il percorso scientifico del candidato si è caratterizzato prevalentemente nello studio di nanostrutture per il rilascio controllato di farmaci. Buona la capacità di attrarre finanziamenti competitivi. Ottima la capacità di promuovere attività di trasferimento tecnologico. Buona la capacità di coordinare gruppi di ricerca. L'impatto globale della produzione scientifica è buono, considerando anche le 3 medie degli indicatori di cui all'articolo 6 e all'allegato A (bibliometrici) del D.M. 76/2012.

L'esame dei lavori selezionati indica che sono congrui con la declaratoria del settore concorsuale 02/B3. La produzione in numero, distribuzione temporale e collocazione editoriale è sufficiente. Le pubblicazioni hanno un sufficiente livello innovativo e l'apporto individuale del candidato è significativo.

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

L'analisi dei titoli, coerenti con il settore concorsuale 02/B3, ha evidenziato: la partecipazione scientifica a progetti di ricerca internazionali e nazionali, l'attribuzione di incarichi di insegnamento o di ricerca internazionali, il conseguimento di premi e riconoscimenti per l'attività scientifica, la partecipazione ad accademie aventi prestigio nel settore, risultati ottenuti nel trasferimento tecnologico, la partecipazione ad attività di formazione scientifica.

La Commissione, utilizzando i criteri adottati per il settore concorsuale 02/B3 e pubblicati sul sito del Ministero, valuta positivamente il Candidato Leporatti Stefano all'attribuzione dell'Abilitazione Scientifica alle funzioni di Professore di Seconda Fascia, con 5/5 componenti favorevoli all'abilitazione.

➤ **National Scientific Qualification (Abilitazione Scientifica Nazionale) to function as a Full professor in the Italian Universities for the Academic Sector 02/B3: Applied Physics (27/12/2013 – 27/12/2024)**

**Judgment:** L'analisi del curriculum vitae, della lista delle pubblicazioni e dei titoli, del candidato Leporatti Stefano, evidenzia una più che buona attività scientifica, afferente al settore concorsuale 02/B3. Il percorso scientifico del candidato si è caratterizzato prevalentemente nello studio di nanostrutture per il rilascio controllato di farmaci. Buone le attività di direzione o coordinamento di gruppi di ricerca. Buone le iniziative per la promozione della formazione scientifica. Ottime le attività gestionali di progetti scientifici.

L'impatto globale della produzione scientifica è buono, considerando anche le 3 medie degli indicatori di cui all'articolo 6 e all'allegato A (bibliometrici) del D.M. 76/2012.

L'esame dei lavori selezionati indica che sono congrui con la declaratoria del settore concorsuale 02/B3. La produzione in numero, distribuzione temporale e collocazione editoriale è buona e presenta un buon impatto nel settore indagato. Le pubblicazioni hanno un buon livello innovativo e l'apporto individuale del candidato è significativo.

L'analisi dei titoli, completamente coerenti con il settore concorsuale 02/B3, ha evidenziato: la direzione scientifica di progetti di ricerca internazionali e nazionali, l'attribuzione di incarichi di insegnamento o di ricerca internazionali, la direzione di comitati editoriali di riviste, il conseguimento di premi e riconoscimenti per l'attività scientifica, risultati ottenuti nel trasferimento tecnologico.

La Commissione, utilizzando i criteri adottati per il settore concorsuale 02/B3 e pubblicati sul sito del Ministero, valuta positivamente il Candidato Leporatti Stefano all'attribuzione dell'Abilitazione Scientifica alle funzioni di Professore di Prima Fascia, con 5/5 componenti favorevoli all'abilitazione.

➤ **National Scientific Qualification (Abilitazione Scientifica Nazionale) to function as a Associate Professor in the Italian Universities for the Academic Sector 02/B1: Experimental Physics of Matter (11/12/2013 – 11/12/2024)**

**Judgment:** Dopo approfondita comparazione delle valutazioni individuali la Commissione formula il proprio giudizio collegiale su Leporatti Stefano. Le pubblicazioni scientifiche presentate risultano coerenti con il settore concorsuale. Presenta 10 lavori di cui 5 pubblicati nei cinque anni solari e consecutivi precedenti la data di presentazione della domanda. Il contributo individuale del candidato nelle pubblicazioni in collaborazione risulta paritetico nell'ambito delle attività di ricerca e sviluppo svolte, con particolare riferimento ai temi: Nanocapsule e nanoparticelle per il trasferimento di farmaci in strutture cellulari. Il curriculum del candidato mostra una attività continuativa. I lavori presentati e allegati sono stati valutati alla luce dei criteri deliberati dalla commissione. La qualità complessiva, valutata all'interno del panorama internazionale della ricerca sulla base dell'originalità, del rigore metodologico e del carattere innovativo e della collocazione editoriale risulta buono (B). Per la produzione

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

scientifica, il valore di VN determinato secondo quanto previsto nell' Allegato B del Verbale I (Ponderazione dei Criteri e Parametri per l'abilitazione alle funzioni di professore di Seconda Fascia), sulla base dei valori degli indicatori bibliometrici forniti dal MIUR tramite l'apposita piattaforma informatica nella data della riunione collegiale finale, è: VN = 27,33. Gli altri titoli presentati sono di livello buono (B). La valutazione collegiale della Commissione sull'attività complessiva del Candidato coerente con il settore concorsuale e': buono (B). Sulla base dei criteri stabiliti e dopo ampia discussione, la Commissione, all'unanimità, formula una valutazione Positiva in merito all'abilitazione del candidato a Professore Associato per l'area disciplinare 02/B1.

➤ **National Scientific Qualification (Abilitazione Scientifica Nazionale) to function as a Full Professor in the Italian Universities for the Academic Sector 02/B1: Experimental Physics of Matter (11/12/2013 – 11/12/2024)**

**Judgment:** Dopo approfondita comparazione delle valutazioni individuali la Commissione formula il proprio giudizio collegiale su Leporatti Stefano. Le pubblicazioni scientifiche presentate risultano coerenti con il settore concorsuale. Presenta 20 lavori di cui 8 pubblicati nei cinque anni solari e consecutivi precedenti la data di presentazione della domanda. Il contributo individuale del candidato nelle pubblicazioni in collaborazione risulta paritetico nell'ambito delle attività di ricerca e sviluppo svolte, con particolare riferimento ai temi: Nanocapsule e nanoparticelle per drug delivery, morfostruttura di cellule. Il curriculum del candidato mostra una attività continuativa. I lavori presentati e allegati sono stati valutati alla luce dei criteri deliberati dalla commissione. La qualità complessiva, valutata all'interno del panorama internazionale della ricerca sulla base dell'originalità, del rigore metodologico e del carattere innovativo e della collocazione editoriale risulta buona (B). Per la produzione scientifica, il valore di VN determinato secondo quanto previsto nell' Allegato A del Verbale I (Ponderazione dei Criteri e Parametri per l'abilitazione alle funzioni di professore di Prima Fascia), sulla base dei valori degli indicatori bibliometrici forniti dal MIUR tramite l'apposita piattaforma informatica nella data della riunione collegiale finale, è: VN = 26,50. Gli altri titoli presentati sono di livello eccellente (A). La valutazione collegiale della Commissione sull'attività complessiva del Candidato coerente con il settore concorsuale e': buona (B). Sulla base dei criteri stabiliti e dopo ampia discussione, la Commissione, all'unanimità, formula una valutazione Positiva in merito all'abilitazione del candidato a Professore Ordinario per l'area disciplinare 02/B1.

### **Professorship Eligibility**

1) **UNIVERSITA' DI PISA**, Dipartimento di Fisica (**Codice selezione PA2014/18**) settore concorsuale **02/B3 “Fisica Applicata”** Procedure selettive per la copertura di n. 46 posti di **Professore Universitario di ruolo - seconda fascia** –da coprire mediante chiamata ai sensi dell'art. 18, comma 1, Legge 240/2010". **n. posti 2, Number of candidates: 24, Final Judgment** "La commissione unanime, avendo accertato attraverso le pubblicazioni la conoscenza della lingua inglese, giudica Stefano LEPORATTI un candidato **molto buono e idoneo** a ricoprire il posto di Professore di II fascia del **SC 02B3**". **Final Ranking: 5<sup>th</sup> Position.**

2) **UNIVERSITA' DI PISA**, Dipartimento di Fisica "Procedura per la copertura di n. I posto di professore associato per il settore concorsuale **02/B3 “Fisica Applicata”** – settore scientifico disciplinare **FIS/07 “Fisica applicata (a beni culturali, ambientali, biologia e medicina)”** (**Codice selezione PA2015/3**) presso il dipartimento di Fisica dell'Università di Pisa, di cui al bando emanato con decreto rettorale n. 5891 del 11 febbraio 2015. **Number of**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**Candidates: 14, Final Judgment:** "La commissione unanime, avendo accertato attraverso le pubblicazioni la conoscenza della lingua inglese, valuta Stefano LEPORATTI un candidato **molto buono e idoneo** a ricoprire il posto di Professore di II fascia del **SC 02B3**". **Final Ranking: 2<sup>nd</sup> Position ex-equo (with 7 candidates).**

3) **Università dell'Aquila**, Dipartimento di Scienze Fisiche e Chimiche, **02.07.2014 (verbale n. 13)** Prot. 36788, Selezione di un **(n.1) professore associato** del SSD: **FIS/01** Fisica Sperimentale, Settore Concorsuale: **02/B1** - Fisica Sperimentale della Materia, **Number of Candidates: 6, Final Judgment:** "La commissione sulla base dell'esame dei titoli, delle pubblicazioni presentate dell'attività didattica del candidato giudica la produzione scientifica **ottima**, i titoli scientifici **più che buoni**, l'attività didattica **discreta**. La commisione, ritenuto il candidato in possesso di adeguate competenze linguistiche, all'unanimità valuta l'attività del candidato Leporatti Stefano in complesso **più che buona.**" **Final Ranking: 4<sup>th</sup> Position.**

4) **Università della Calabria**, PROCEDURA SELETTIVA PER LA COPERTURA DI UN POSTO DI PROFESSORE UNIVERSITARIO DI RUOLO, SECONDA FASCIA, PER IL SETTORE CONCORSUALE 02/B3, SETTORE SCIENTIFICO-DISCIPLINARE FIS/07 PRESSO IL DIPARTIMENTO DI FISICA INDETTO CON D.R. N. 1113 DEL 13 GIUGNO 2014. **Number of Candidates: 15, Final Judgment** "Il giudizio complessivo sul curriculum scientifico e didattico è **MOLTO BUONO**. **Final Raking: 3<sup>rd</sup> Position Ex-equo.**

5) **Università degli Studi di Cagliari**, "D.R. n. 135 del 6 novembre 2014, Procedure selettive libere di chiamata di complessivi n. 6 **professori associati** ai sensi dell'art. 18, comma 1, della legge 240/2010, Codice procedura: assss\_1114\_02/B1, **SC 02/B1, SSD FIS/01**, Dipartimento di Fisica, **no: posti 1, Number of Candidates: 7, Final Judgment:** "il giudizio collegiale della commissione i) per l'attività scientifica del candidato è **ottimo** ; ii) per i titoli scientifici e didattici presentati: **buono**; iii) per la congruità del Candidato con quanto indicato dal Dipartimento richiedente per l'impegno didattico e scientifico da svolgere è **limitato**. la valutazione della commissione sull'attività complessiva del candidato, tenuto conto della coerenza con il settore concorsuale e le indicazioni del bando di professore di II fascia in oggetto è **buono**". **Final Ranking: 3<sup>rd</sup> Position Ex-equo.**

6) **UNIVERSITÀ DEGLI STUDI DI GENOVA**, " Professore di seconda fascia- ssd FIS/01 presso il DIFI D.R. n. 727 del 13.6.2014 - Procedura selettiva volta alla copertura di **n. 1 posto** di professore di seconda fascia, mediante chiamata, ai sensi dell'art. 18, comma 1, della legge 30.12.2010, n. 240, per il settore scientifico-disciplinare **FIS/01** Fisica sperimentale presso il Dipartimento di Fisica (DIFI)." **Number of Candidates: 6; Final Judgment:** "Sulla base dell'attività scientifica svolta dal candidato, tenuto altrsi conto dell'aderenza alla esigenze di ricerca dell'Ateneo, espresse dalle informazioni circa l'impegno scientifico e didattico contenute nel bando, la valutazione complessiva della commissione risulta: **buona**" **Final Ranking: 3<sup>rd</sup> Position Ex-equo.**

7) **UNIVERSITÀ DEGLI STUDI DI GENOVA**, Decreto Rettoriale n. 1710, " **Professore di seconda fascia - ssd FIS/07** presso il DIFI D.R. n. 1710 del 18.12.2014 - Procedura selettiva volta alla copertura di **n. 1 posto** di professore di seconda fascia, mediante chiamata, ai sensi dell'art. 18, comma 1, della legge 30.12.2010, n. 240, per il settore scientifico-disciplinare **FIS/07** Fisica sperimentale, settore concorsuale 02/B3 Fisica applicata, presso il Dipartimento di Fisica (DIFI)" **Number of Candidates: 9, Final Judgment: 1) congruenza: buona 2)**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

Qualità della produzione scientifica: **ottima** 3) Attività scientifica: ottima 4) Attività didattica e accademica: **buona** "Final Ranking: 2<sup>nd</sup> Position Ex-Equo

8) **Università degli Studi di Torino**, "Procedura selettiva per n. 1 posto di Professore Universitario di ruolo - seconda fascia - da coprire mediante chiamata ai sensi dell'art. 18, comma 1, Legge 240/2010 - Dipartimento di Fisica - settore concorsuale **02/B3** (Fisica applicata) - ssd **FIS/07** (Fisica applicata - a beni culturali, ambientali, biologia e medicina) - avviso G.U.n. 100 del 23/12/2014" **Number of Candidates: 10; Evaluation** 1) Attività di ricerca e pubblicazioni scientifiche: **45\50**; Attività di didattica\didattica integrativa e di servizio agli studenti: **24/50**; Final Evaluation: **69\100; Final Ranking: 4<sup>th</sup> Position.**

9) **Università degli Studi di Pavia**, D.R. 219-2014, Dipartimento di Fisica, **Posti n.1, SC 02/B1**-Fisica Sperimentale della Materia, **SSD FIS/01** Fisica Sperimentale e **FIS/03** Fisica della Materia, **Number of Candidates: 7; Final Judgment:** "L'attività didattica è valutata all'unanimità complessivamente **sufficiente**. La commissione unanime giudica **molto buona** l'attività di ricerca scientifica del candidato. Il giudizio unanime sulle pubblicazioni scientifiche è **buono**" **Final Ranking: 5<sup>th</sup> position.**

10) **Università Politecnica delle Marche** (D.R. n. 892 del 16/12/2014) Dipartimento di Scienze e Ingegneria della Materia, dell'Ambiente ed Urbanistica, **n. 1 posto di Professore Associato**, settore concorsuale **02/B1**- Fisica Sperimentale della Materia, settore scientifico-disciplinare **FIS/01** – Fisica sperimentale. **Number of Candidates: 4, Final Judgment:** " Il candidato ha una esperienza didattica limitata. L'attività scientifica è di livello molto buono svolta principalmente nell'ambito di nanoscienze e nanotecnologie applicate alla medicina con un significativo contributo allo sviluppo di indagini sperimentali quali la Microscopia a Scansione di Forza, ma poco pertinente con quanto indicato nel bando della procedura di chiamata" **Final Ranking: 3<sup>rd</sup> Position Ex-equo.**

11) **Università di Padova**, Procedura selettiva per la chiamata di **n. 1 posto di Professore di prima fascia** presso il Dipartimento di Ingegneria dell'Informazione-DEI, per il settore concorsuale **02/B1-Fisica sperimentale della materia** (settore scientifico disciplinare **FIS/03** Fisica della materia) ai sensi dell'art. 18, comma 1, Legge 30 dicembre 2010, n. 240. Avviso pubblicato nella G.U., 4<sup>^</sup> serie speciale, n. 94 del 02/12/2014) **Number of Candidates: 2, Final Judgment:** "Il giudizio complessivo della Commissione sulle **pubblicazioni scientifiche** presentate, sul **curriculum** e sull'**attività didattica** del candidato è **molto buono**. Nel complesso la commissione esprime pieno apprezzamento per la qualificazione scientifica del candidato. La competenza linguistica del candidato risulta **adeguata**. **Giudizio Complessivo:**" Sulla base delle risultanze della discussione collegiale, avvenuta attraverso l'analisi dei giudizi su pubblicazioni scientifiche, curriculum, attività didattica, qualificazione scientifica e competenze linguistiche, la Commissione esprime una valutazione complessiva **molto buona** ai fini della copertura del posto a concorso". **Final Ranking: 2<sup>nd</sup> Position.**

12) **Università di Brescia**, Procedura selettiva per la chiamata di **n. 1 posto di Professore di prima fascia** presso il Dipartimento di Ingegneria dell'Informazione, per il settore concorsuale **02/B1-Fisica sperimentale della materia** (settore scientifico disciplinare **FIS/01** Fisica Sperimentale) ai sensi dell'art. 18, comma 1, Legge 30 dicembre 2010, n. 240. **Number of Candidates: 3, Final Judgment:** "Dopo ampia e approfondita discussione, ciascuno dei Commisari aderisce alle conclusioni collegiali riportate di seguito: Stefano Leporatti viene valutato dalla commissione un ricercatore buono di buona maturità con un curriculum congruente con le tematiche del settore scientifico disciplinare FIS01 Fisica Sperimentale. L'attività didattica è modesta sebbene in linea con le tematiche del settore scientifico disciplinare FIS01 Fisica Sperimentale. I titoli presentati sono sufficienti. La

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

responsabilità scientifica come coordinatore di progetti internazionali bilaterali (Italia-USA e Italia-Portogallo) dimostra capacità di coordinamento. Il candidato Stefano Leporatti presenta, ai fini della valutazione solamente 20 pubblicazioni scientifiche rispetto alle 30 richieste dal bando, che rappresentano significativi contributi nell'ambito delle tematiche proprie del settore scientifico disciplinare, pubblicate su prestigiose riviste del settore. Le pubblicazioni presentate al fine della valutazione in questa procedura testimoniano una attività di ricerca significativa sia in microscopia a forza atomica che in metodi per l'assemblaggio di micro- e nano-capsule di polielettolite. La valutazione della commissione relativamente ai titoli presentati è di punti 25 su 40. La valutazione della commissione relativamente alle pubblicazioni scientifiche presentate è di punti 30 su 60, tenuto conto del minore numero di pubblicazioni presentate rispetto alla richiesta del bando. **Valutazione Finale: Discreto, Final ranking 3<sup>rd</sup> Position.**

**13) Università di Pavia,** Procedura di selezione per la chiamata di **n.1 Professore di Prima fascia**, ai sensi dell'art. 18, comma 1, della legge 240/2010, per il **settore concorsuale 02/B1-Fisica Sperimentale della Materia, settore scientifico disciplinare FIS/03-Fisica della Materia** presso il Dipartimento di Fisica , indetta con D.R. Prot. N. 15151 del 7 Aprile 2016 il cui avviso è stato pubblicato sulla G.U.-IV Serie Speciale -N. 30 del 15 aprile 2016. **Number of Candidates: 2.**

#### **Giudizio Collegiale del candidato Stefano Leporatti**

**Attività didattica:** Il candidato Stefano Leporatti ha svolto un ciclo di esercizi ed esercitazioni di laboratorio per studenti di medicina e biofisica nel 2001, un seminario per studenti di biotecnologie nel 2006, seminari nel 2011, 2012, 2016 e cinque cicli di lezioni per laurea e dottorato dal 2012 al 2015. Non riporta dati di valutazione degli studenti. E' stato supervisore di quattro tesi di dottorato e di dodici tesi di laurea e laurea specialistica. Mentre l'attività didattica universitaria risulta sporadica è ottima l'attività di supervisione nelle fasi finali degli studi e nel dottorato. Di conseguenza **il giudizio complessivo sull'attività didattica del candidato è buona.**

**Attività scientifica:** il Candidato ha svolto numerosi periodi di ricerca all'estero. Al momento coordina con la qualifica di Primo Ricercatore CNR un gruppo di ricerca composto da due studenti di dottorato, due laureandi ed un post-doc, su ricerche di biomeccanica e nano-carriers. E' stato coordinatore di due progetti bilaterali, ha partecipato a numerosi progetti nazionali, ed ha ricoperto il ruolo di responsabile locale in un progetto FP7 e in un progetto industriale. Stefano Leporatti ha svolto oltre dieci relazioni su invito a conferenze e workshop internazionali, e numerose relazioni a conferenze e riunioni nazionali. Presenta 76 pubblicazioni su riviste con peer review, che presentano anche elementi relativi alla preparazione e caratterizzazione di nanomateriali, rilevanti per il settore disciplinare FIS/03. I contributi risultano essere originali in un campo interdisciplinare al confine con la medicina, al momento molto attivo. Il numero totale di citazioni è maggiore di 2700 e porta ad un indice di Hirsch di 26. **Si giudica pertanto il curriculum scientifico del candidato ottimo anche su scala internazionale**

**Giudizio sulle quindici pubblicazioni presentate dal Candidato:** Il Candidato presenta 15 pubblicazioni che coprono il periodo 2000-2014, totalizzando 1172 citazioni (WoS) con un numero medio di citazioni per prodotto pari a 78, un impact factor complessivo di 121 ed un h-index di 13, Egli è il primo autore di due di queste pubblicazioni, tre volte secondo autore e cinque volte ultimo autore, a dimostrazione di un contributo di grande rilevanza ai lavori presentati. I lavori presentati risultano di grande interesse in un campo che premia sia il successo nella tecnologia dei materiali allo stato solido sia la sua applicazione in campo biomedico, ma non indicano competenze specifiche sulle risonanze magnetiche e di spin. **II**

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**giudizio risultante sulla scorta degli indici bibliometrici e delle precedenti considerazioni è di eccellenza scientifica**

**Giudizio sulla presentazione di Stefano Leporatti:** Il candidato illustra la propria attività di ricerca recente sulla caratterizzazione e l’impiego di materiali nano-strutturati per applicazioni di veicolazione del farmaco. Descrive in successione esperimenti di successo che riguardano capsule globulari di poli-elettroliti, nanotubi basati su ossido di alluminio e micelle. L’attenzione è focalizzata sul successo della veicolazione e del rilascio del Farmaco in vitro. Il candidato risponde alle domande e alle richieste di chiarimento dei membri della commissione.

**A giudizio unanime della commissione la presentazione del candidato Stefano Leporatti risulta ottima.**

**Giudizio Complessivo:**

L’attività didattica del candidato Stefano Leporatti è stata unanimamente giudicata **buona**

Il Curriculum scientifico del candidato Stefano Leporatti è ritenuto unanimamente **eccellente**

Le quindici pubblicazioni del candidato Stefano Leporatti sono state unanimamente giudicate scientificamente **eccellenti**

A giudizio unanime della commissione la presentazione del candidato Stefano Leporatti risulta **ottima**

**Giudizio Finale: Ottimo, Final ranking 2<sup>nd</sup> Position**

14) **Università di Napoli**, Procedura comparativa per la copertura di n.1 posto **Professore Universitario di ruolo di Prima fascia, per il settore concorsuale 02/B1-Fisica Sperimentale della Materia, settore scientifico disciplinare FIS/01\_FIS/03-Fisica della Materia** per le esigenze del Dipartimento di Fisica "Ettore Pancini", ai sensi dell'art. 18, comma 4, della legge 240/2010, (codice di procedura: I\_PO\_2016\_I8C4\_2). **Number of Candidates: 3.**

**Giudizio Prova Seminariale (06/10/2016):**

Il candidato descrive la propria attività con capacità di sintesi, evidenziando con chiarezza il proprio contributo originale alle varie attività presentate. Le attività descritte sono relative alla applicazione di tecniche fisiche per la caratterizzazione di strutture in scala nanometrica di interesse nel campo delle biotecnologie mediche. Il candidato dimostra conoscenza e padronanza della ricerca in cui è coinvolto e capacità di inquadrare la propria attività nel contesto delle sue collaborazioni nazionali e internazionali. Apprezzabile la chiarezza espositiva e la capacità di rispondere in modo esauriente alle domande. Nel complesso il giudizio sulla presentazione seminariale delle attività del candidato è **più che buono**.

**Argomento Prova didattica : "Scattering dei raggi X: aspetti teorici e sperimentalisti"**

**Giudizio Prova Didattica (07/10/2016):**

Il candidato ha tenuto una lezione sullo scattering a raggi X, presentandone le caratteristiche fondamentali e descrivendo alcune tecniche sperimentali (SAXS, GIXD) per un corso di Laurea Triennale in Fisica con sufficiente chiarezza espositiva e organicità argomentativa, mostrando adeguata conoscenza della materia. L’efficacia didattica è limitata. La completezza e il rigore logico sono sufficienti. Complessivamente il giudizio è **sufficiente**.

**Giudizio Finale: Più che buono, Final Ranking: 3<sup>rd</sup> Position**

15) **Università di Pisa**, Procedura per la copertura di un posto di **professore associato per il settore concorsuale 02/B1 "Fisica Sperimentale della Materia", settore scientifico disciplinare FIS/03 "Fisica della Materia"** presso il Dipartimento di Fisica (Codice selezione PA2016/42): **Number of Candidates: 9**

**Giudizio collegiale:**

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

Il candidato presenta per la valutazione 12 pubblicazioni, tutte in inglese, su riviste scientifiche molto rilevanti nel suo settore di ricerca. Questi lavori sono congrui con il bando. Il contributo personale del candidato è evidenziato dal numero di lavori di cui è primo autore (2) e ultimo autore (5). Tenuto conto anche del numero, della collocazione editoriale e dell'impatto delle pubblicazioni complessive come presentate nel curriculum, la commissione valuta il profilo scientifico del candidato di livello **ottimo**. Dimostra capacità gestionali e di coordinamento, nonché visibilità scientifica **molte buone**. L'attività di ricerca, prevalentemente di nano- e bio-fisica con applicazioni di nanomedicina è coerente con il profilo scientifico richiesto. Presenta un'attività didattica frontale principalmente di supporto, ma buona di supervisione di tesi. La commissione unanime, avendo accertato attraverso le pubblicazioni presentate la conoscenza della lingua inglese, valuta Stefano LEPORATTI un **candidato molto buono e qualificato** a ricoprire il posto di Professore di II fascia del SC 02/B1.

**Final Ranking: 3<sup>rd</sup> Position Ex-Equo**

16) **Università di Torino**, Procedura Selettiva a n.1 Posto di **Professore di Ruolo di seconda Fascia** (art 18, comma 4, Legge 240/2010) presso il Dipartimento di Biotecnologie Molecolari e Scienze della Salute dell'Università degli Studi di Torino settore concorsuale 02/DI-S.S.D. FIS/07 bandito con D.R. N. 2556 del 22/7/2016 con avviso pubblicato nella Gazzetta Ufficiale N. 62 del 5 Agosto 2016-IV Serie Speciale Concorsi ed Esami).

**Number of Candidates: 6**

Candidato : **Stefano Leporatti**

Valutazione attività di ricerca e pubblicazioni scientifiche **41.14**

Valutazione attività didattica/didattica integrativa e di servizio agli studenti: **0.5**

Valutazione complessiva: **41.64**

**Final Ranking: 4<sup>th</sup>**

17) **Università di Padova**, Procedura Selettiva 2017PO181 per la chiamata di n.1 posto di **Professore di Prima Fascia** presso il Dipartimento di Fisica e Astronomia "Galileo Galilei"-DFA, per il settore concorsuale 02/B1-Fisica Sperimentale della materia (profilo: settore scientifico disciplinare FIS/03-Fisica della Materia) ai sensi dell'art. 18, comma 1, Legge 30 dicembre 2010, n.240.

**Number of Candidates: 5**

Candidato : **Stefano Leporatti**

Motivato Giudizio:

**- Pubblicazioni Scientifiche e Attività di Ricerca**

Il candidato Stefano Leporatti documenta una estesa attività di ricerca sperimentale incentrata sullo studio di biomateriali e sistemi di drug delivery di grande attualità. per queste ricerche il candidato ha utilizzato tecniche avanzate di microscopia a forza atomica e di microscopia confocale, unendo le possibilità di caratterizzazione e studio che queste metodiche gli consentono ad attività di preparativa di bio-sistemi avanzati (assemblaggio layer-by-layer di micro- e nano-capsule ingegnerizzate per specifiche funzioni di drug-delivery). Dopo aver preso in esame ciascuna pubblicazione singolarmente, la commissione valuta il **complesso delle pubblicazioni OTTIMO**.

La consistenza della sua **produzione scientifica è elevata**. I lavori sottoposti per la valutazione sono pubblicati su riviste di **buon fattore di impatto**. Il **livello di citazione** dei lavori è **alto**, a dimostrazione dell'interesse che queste ricerche suscitano nella comunità scientifica di riferimento. Gli argomenti delle ricerche sono solo parzialmente congruenti con il settore concorsuale , essendo in molti casi più pertinenti alla fisica applicata ed alla biofisica

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

sperimentale (SC 02/D1). La commissione valuta l'**attività di ricerca** del candidato di livello **MOLTO BUONO**

**- Curriculum e attività istituzionali, gestionali, organizzative e di servizio**

Le ricerche svolte dal candidato si sono svolte nel contesto di un'ampia rete di collaborazioni e di progetti di ricerca coordinati, nei quali egli ha svolto quasi sempre compiti di responsabilità di gruppi di ricerca. Non risultano attività di coordinamento didattico. Complessivamente la commissione valuta le **attività di coordinamento** del candidato **BUONE**

**- Attività didattica**

Stefano Leporatti ha tenuto numerosi insegnamenti monografici nell'ambito di corsi di dottorato di ricerca e cicli di lezioni nell'ambito di insegnamenti universitari. Il candidato non ha svolto attività didattica istituzionale a livello universitario in forma continuativa ed in particolare non risulta essere stato responsabile di insegnamenti.

La commissione giudica quindi l'attività didattica del candidato **BUONA**

**- Accertamento della qualificazione scientifica e delle competenze linguistiche**

Il candidato ha partecipato a congressi internazionali anche come relatore su invito e ha tenuto cicli di lezioni anche all'estero. La sua qualificazione scientifica e la sua conoscenza della lingua inglese sono chiaramente accertate.

**Punteggi**

- Pubblicazioni Scientifiche: 27.7/100
- Attività di Ricerca: 19/100
- Curriculum e attività istituzionali, gestionali, organizzative e di servizio: 7/100
- Attività didattica: 9/100

**Giudizio Complesivo: MOLTO BUONO (62.7/100)**

**Final Ranking: 4<sup>th</sup> ex-equo**

18) **Università di Padova**, Procedura Selettiva 2017PO182 per la chiamata di n.1 posto di **Professore di Prima Fascia** presso il Dipartimento di Fisica e Astronomia "Galileo Galilei"-DFA, per il settore concorsuale 02/D1-Fisica applicata, didattica e storia della fisica (profilo: settore scientifico disciplinare FIS/07-Fisica applicata (a beni culturali, ambientali, biologia e medicina) ai sensi dell'art. 18, comma 1, Legge 30 dicembre 2010, n.240.

**Number of Candidates: 3**

Candidato : **Stefano Leporatti**

**Punteggi:**

- pubblicazioni scientifiche e attività di ricerca: 50/100
- Curriculum e attività istituzionali, gestionali, organizzative e di servizio: 7/100
- Attività didattica: 8\100

**Giudizio Complessivo: punti 68/100**

**Final ranking: 2<sup>nd</sup>**

19) **Politecnico di Torino**, Procedura di selezione per professore universitario di ruolo di I fascia-L240/10, Decreto Rettoriale 680 del 13/12/2016, settore concorsuale: 02/B1 Fisica Sperimentale della Materia, Settore Scientifico Disciplinare: FIS/03 Fisica della Materia (Codice interno: 19/16/P/O)

**Number of Candidates: 6**

Candidato : **Stefano Leporatti**

**Punteggi:**

- Attività Scientifica: 33/40)
- Coordinamento di gruppi e progetti di ricerca\trasferimento tecnologico: 17 /30

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

-Reputazione nazionale e internazionale e attività di servizio per la comunità scientifica: 9/10

-Attività didattica: 5/10

-Servizi e incarichi istituzionali presso Atenei italiani ed esteri e/o enti pubblici e provati con finalità scientifiche e/o di trasferimento tecnologico: 5/10

**Giudizio Collegiale complessivo Sintetico: Buono**

**Punteggio Preliminare Complessivo: 69**

**Giudizio complessivo del seminario pubblico: Molto buono.**

**Punteggio Complessivo: 70.65/100**

**Final ranking: 6<sup>th</sup> place**

20) **Scuola Normale Superiore**, Procedura di selezione per la copertura di **un posto di professore universitario di seconda fascia** a sensi del art.18, comma 1, della Legge 30 dicembre 2010, n.240 presso la classe di Scienze matematiche e naturali, per il settore concorsuale 02/DI- Fisica applicata, didattica e storia della fisica (profilo: settore scientifico disciplinare FIS/07-Fisica applicata (a beni culturali, ambientali, biologia e medicina). (Protoc: n. 005494 del 22/03/2017-Albo Ufficiale di ateneo-106/2017)

Number of candidates: 4

**Giudizi:**

-Attività di ricerca scientifica: **Buona**

-Valutazione delle pubblicazioni scientifiche: La commissione ha accertato che il candidato nel quinquennio 2012-2016 ha una produttività scientifica pari a n.2,2 prodotti scientifici l'anno e quindi **soddisfa il requisito minimo** per essere ritenuto **meritevole** ai fini della chiamata

- La commissione ritiene le pubblicazioni scientifiche presentate dal candidato di livello e di qualità **ottimo**.

- Valutazione dell'attività didattica: La commissione ritiene che l'attività didattica sia: **discreta**

**Valutazione complessiva relativa a tutte le attività** del candidato Stefano Leporatti:

il candidato **possiede la qualificazione richiesta** per ricoprire il ruolo messo a bando

**Giudizio Finale sul profilo scientifico e didattico** del candidato Stefano Leporatti:

**BUONO (punteggio pari a 9/10)**

**Final Ranking: 3<sup>rd</sup> place**

### **CNR Researcher (III Livello) Permanent Position Eligibility**

#### **BANDO N. 366.6 DSFTM RIC**

CONCORSO PER TITOLI ED ESAMI AI SENSI DELL'ART. 4, COMMA 6, DELLA LEGGE 30 OTTOBRE 2013 N. 125 RISERVATO AL PERSONALE DEL CNR CON CONTRATTO DI LAVORO A TEMPO DETERMINATO CON PROFILO DI RICERCATORE E/O TECNOLOGO PER L'ASSUNZIONE CON CONTRATTO DI LAVORO A TEMPO INDETERMINATO DI N. 1 UNITÀ DI PERSONALE CON PROFILO DI RICERCATORE III LIVELLO PROFESSIONALE, DA ASSEGNAME AL DIPARTIMENTO SCIENZE FISICHE E TECNOLOGIE DELLA MATERIA OVVERO AD UN ISTITUTO AD ESSO AFFERENTE

**Number of Candidates: 6**

**Valutazione complessiva: 82.11/100**

**Final Ranking: 4<sup>th</sup>**

#### **Bando N. 367.14 DSCTM IC RIC**

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**CONCORSO PUBBLICO PER TITOLI ED ESAMI PER L'ASSUNZIONE CON CONTRATTO DI LAVORO A TEMPO PIENO E INDETERMINATO DI UNA UNITÀ DI PERSONALE PROFILO RICERCATORE, III LIVELLO PROFESSIONALE PRESSO L'ISTITUTO DI CRISTALLOGRAFIA DI BARI - AFFERENTE AL DIPARTIMENTO DI SCIENZE CHIMICHE E TECNOLOGIE DEI MATERIALI DEL CONSIGLIO NAZIONALE DELLE RICERCHE**

**Number of Candidates: 14**

**Valutazione complessiva: 86.7/100**

**Final Ranking: 3<sup>rd</sup>**

### **BANDO N. 367.75 DSFTM NANOTEC RIC**

**CONCORSO PUBBLICO PER TITOLI ED ESAMI PER L'ASSUNZIONE CON CONTRATTO DI LAVORO A TEMPO PIENO E INDETERMINATO DI UNA UNITÀ DI PERSONALE PROFILO RICERCATORE, III LIVELLO PROFESSIONALE PRESSO L'ISTITUTO DI NANOTECNOLOGIA (CNR NANOTEC) SEDE DI LECCE AFFERENTE AL DIPARTIMENTO DI SCIENZE FISICHE E TECNOLOGIE DELLA MATERIA DEL CONSIGLIO NAZIONALE DELLE RICERCHE**

**Number of Candidates: 15**

**Valutazione complessiva: 78.36/100**

**Final Ranking: 11<sup>th</sup>**

### **Bando 367.9 DSFTM IMM RIC ISTITUTO PER LA MICROELETTRONICA E MICROSISTEMI**

**CONCORSO PUBBLICO PER TITOLI ED ESAMI PER L'ASSUNZIONE CON CONTRATTO DI LAVORO A TEMPO PIENO E INDETERMINATO DI UNA UNITÀ DI PERSONALE PROFILO RICERCATORE, III LIVELLO PROFESSIONALE PRESSO L'ISTITUTO PER LA MICROELETTRONICA E MICROSISTEMI UOS DI BOLOGNA - AFFERENTE AL DIPARTIMENTO SCIENZE FISICHE E TECNOLOGIE DELLA MATERIA DEL CONSIGLIO NAZIONALE DELLE RICERCHE**

**Number of Candidates: 30**

**Valutazione complessiva: 82.90/100**

**Final Ranking: 15<sup>th</sup>**

**Finalist @ CNR Senior Researcher (II Livello) Permanent Position**

### **Bando 367.14I PR STRUTTURE/ ISTITUTI DEL CONSIGLIO NAZIONALE DELLE RICERCHE**

**CONCORSO PUBBLICO PER TITOLI E COLLOQUIO PER L'ASSUNZIONE CON CONTRATTO DI LAVORO**

**A TEMPO PIENO E INDETERMINATO DI N. I UNITÀ DI PERSONALE PROFILO PRIMO RICERCATORE - II LIVELLO PROFESSIONALE - PRESSO IL CONSIGLIO NAZIONALE DELLE RICERCHE**

**Total Number of Candidates: 121**

**Number of Candidates admitted to Oral examination : 12**

**Valutazione complessiva: 76.10/100 (Titles: 42.10/60; Oral examination: 34/40)**

**Final Marks: 76.10/100 (< 80/100 Threshold for Eligibility)**

**Final Ranking: 7<sup>th</sup> Place**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

### **CNR Senior Researcher (II Livello) Permanent Position Eligibility**

#### **Bando 367.194 PR SISTEMI COMPLESSI MATERIA SOFFICE BIOFISICA STRUTTURE/ ISTITUTI DEL CONSIGLIO NAZIONALE DELLE RICERCHE**

CONCORSO PUBBLICO PER TITOLI E COLLOQUIO PER L'ASSUNZIONE CON CONTRATTO DI LAVORO

A TEMPO PIENO E INDETERMINATO DI N. I UNITÀ DI PERSONALE PROFILO PRIMO RICERCATORE - II LIVELLO PROFESSIONALE - PRESSO IL CONSIGLIO NAZIONALE DELLE RICERCHE

**Total Number of Candidates:>120**

Number of Candidates admitted to Oral examination : 12

**Valutazione complessiva: 80.27/100 (Titles: 47.27/60; Oral examination: 33/40)**

**Final Marks: 80.27/100**

**Final Ranking : 8<sup>th</sup> Place**

### **CNR Director of Research (I Livello) Permanent Position Eligibility**

#### **Bando 367.161 DR STRUTTURE/ ISTITUTI DEL CONSIGLIO NAZIONALE DELLE RICERCHE**

CONCORSO PUBBLICO PER TITOLI E COLLOQUIO PER L'ASSUNZIONE CON CONTRATTO DI LAVORO

A TEMPO PIENO E INDETERMINATO DI N. I UNITÀ DI PERSONALE PROFILO DIRIGENTE DI RICERCA - I LIVELLO PROFESSIONALE - PRESSO IL CONSIGLIO NAZIONALE DELLE RICERCHE, AREA STRATEGICA MATERIALI INNOVATIVI, TECNICHE AVANZATE DI CARATTERIZZAZIONE E MODELLING

**Total Number of Candidates: > 100**

**Number of Candidates eligible: 45**

**Final Ranking: 30<sup>th</sup> Place**

#### **Projects (Financed):**

1. Progetto Bilaterale Italia-USA, "Nanocarriers for Cancer Therapy" from Italian Ministero degli Esteri (MAE) (**ITA Coordinator Dr. Stefano Leporatti**, USA Coordinator Prof. Yuri M. Lvov, Institute of Micromanufacturing (IfM) Louisiana Tech. University, Ruston, Louisiana). (July 2008- July 2011) Theme: "Development and characterisation of nanocarriers produced by LbL drugs encapsulation for studying their uptake by cancer cells: application in novel therapies against cancer". Team: Stefano Leporatti (Coordinator), Viviana Vergaro (PhD student).
2. Progetto UdR-IIT-NNL Lecce (Coordinator Prof. R. Rinaldi). "Cell to chips and chips to cells "(July 2009-July 2011). Theme: "Cytomechanics of cancer cells and nano-engineering of drug-loaded carriers as a new nanotechnological therapy against cancer". Team: **Stefano Leporatti (PI)**, Viviana Vergaro (PhD student)
3. Progetto "Reti di Laboratorio" finanziato dalla Regione Puglia "Nano-Biotecnologie per diagnostica e sviluppo di terapie innovative" (NaBiDiT) (2010-2013) (Coordinator Prof. R. Rinaldi). Theme: "Fabrication and characterization of nano- and microcapsules of biocompatible and biodegradable polyelectrolyte multilayers made on nano- and microtemplates dissolvable in mild conditions for encapsulation of low solubility drugs and for intracellular controlled delivery". Team: **Stefano Leporatti (PI)**, Valentina Arima (CNR Researcher), Viviana Vergaro (PhD student), Flavia Scarlino (Post-graduated Fellowship), Claudia Bellomo (Undergraduate Student).

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

4. Progetto "Reti di Laboratorio" finanziato dalla Regione Puglia "Nano-Biotecnologie per diagnostica e sviluppo di terapie innovative" (2010-2013) (Coordinator Prof. R. Rinaldi). Theme: "Development of nano- and microgels, micro- and nanotubes and rings of polyelectrolyte multilayers, nanoassembled onto a semiconductor surface by Layer-by-Layer (LbL) technique and rolled by micro e nano-fabbrication technologies". Team: **Stefano Leporatti (PI)**, Laura Blasi (CNR Researcher), Teresa Todaro (CNR Researcher) Viviana Vergaro (PhD student), Simona Argenteri (Postdoctoral researcher).
5. Progetto Bilaterale Italia-Portogallo del CNR "Nanocapsule e nanoparticelle per il delivery controllato di Beta-Sheet Breaker Peptides" in collaboration with Prof. Manuel Coelho (Department of Chemical Engineering, Porto University, Portugal) through "Accordo di Cooperazione scientifica tra il CNR e la FCT " (2009-2010). Theme: Development of functionalised nanoparticles and nanocapsules for controlled delivery. Team: **Stefano Leporatti (Coordinator)**, Viviana Vergaro (PhD student).
6. Progetto Regionale "Ritorno al Futuro " finanziato dalla Regione Puglia, "Incapsulazione di Antocianine in nanovettori (Incanto)" (2010-2011). Team: **Stefano Leporatti (Tutor)**, Giovanna Lucarelli (Fellowship winner, Postgraduated Student), Giuseppe Ciccarella (Resercher). Industrial Collaborators: Green Chem Lab, Lecce (Prof. G. Vasapollo).
7. Progetto Associazione Italiana Ricerca Cancro (AIRC) " (2010-2012) "Locoregional delivery of unmethylated CpG-oligodeoxynucleotides for cancer therapy: preclinical and clinical studies "Coordinator: Prof. Andrea Balzari, Immunology Chair, University of Milan and Istituto Nazionale Tumori (INT), Milan. **Collaborator: Dr. Stefano Leporatti**.
8. Fondazione Caripuglia 2009 Coordinator: Prof. Gianluigi Giannelli, **Collaborator: Dr. Stefano Leporatti**.
9. Progetto Impresa "Pharmacological Innovative Drug Tracking, (Pharmatracking)" Coordinator: Prof. Gianluigi Giannelli, **Collaborator: Dr. Stefano Leporatti**.
10. Progetto Innova Onlus (Industrial Project), Title "Delivery of bioactive compounds and anti-neoplastic drugs through tailored nano-encapsulation for biomedical applications". **Coordinator and Team Leader: Dr. Stefano Leporatti**.
11. Call: FP7-PEOPLE-2012-ITN Marie Curie Initial Training Networks (ITN) "Strategy to Inhibit TGF- $\beta$ 1 in liver disease (IT-Liver)" (2012-2016) Coordinator: Dr. Isabel Fabregat, PhD; **CNR-Nano Responsabile: Dr. Stefano Leporatti**.
12. Progetto Associazione Italiana Ricerca Cancro (AIRC) " (2011-2013) "Targeting TGF-beta1 as a sustained released and tailored therapy in patients with HCC" Coordinator: Prof. Gianluigi Giannelli (University of Bari, Department of Internal Medicine, Policlinic di Bari). **Collaborator: Dr. Stefano Leporatti**.
13. Progetto Prin "NANO Molecular Technologies for Drug delivery (NANOMED)" (2012-2015) Coordinator: Prof. Giuseppe Vasapollo (University of Salento, Department of Innovation Engineering, Lecce, Italy), **Partner for CNR: Dr. Stefano Leporatti**
14. Progetto Regionale Distretti Tecnologici "Rigenerazione di tessuti nervosi ed osteocartilaginei mediante innovativi approcci di Tissue Engineering (RINOVATIS)" (2013-2015) Coordinator: Prof. Alessandro Sannino (University of Salento, Department of Innovation Engineering, Lecce, Italy), **Partner for CNR-Nano: Dr. Stefano Leporatti**.

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

15. Progetto Associazione Italiana Ricerca Cancro (AIRC) (2016-2019) "TARGETING NOTCH PATHWAY FOR PERSONALIZING THERAPY IN CHOLANGIOPANCREATIC CANCER". Coordinator: Prof. Gianluigi Giannelli, (Department of Biomedical Sciences and Human Oncology, University of Bari Medical school, Bari, Italy)  
**Collaborator: Prof. Stefano Leporatti.**

#### CNR Commission Member in Tenders for:

1. Ricercatore III liv. (CNR Researcher)
  - BANDO 001\_2010 LE – prot. n. NANO-CNR 1589 del 30/6/2010, Role: **Effective Member**
  - Bando NANO 010/2013 LE – prot. 41259 del 09/07/2013, Role: **President**
  - Bando N. NANO 011/2013 LE – prot. 0004506 del 25/07/2013, Role: **Effective Member**.
  - Bando N. NANO 009/2013 LE – prot. 4777 del 06/08/2013, Role: **Effective Member**
  - BANDO N. 400.13 NANOTEC PNRR – prot. n. 0205954 in data 04/07/2023. Role: **Effective Member**
2. Borsa di Studio (CNR Graduate)\Postgraduate Fellowship
  - Bando CNR-INFN n. BS 20/2009, Atto della Responsabile CNR-INFN n. 912/09 del 22/12/2009, Role: **Effective Member**
3. Assegno di ricerca\_(CNR Postdoc Fellowship)
  - Bando CNR-INFN n. AR 10/2009 atto n.423/09. Role: **Effective Member**

#### Assignments:

#### 2018-2019

Nominated RUP (Responsabile Unico Procedimento) for Tenders with budget less than 40000 euro.

#### N. 202310 del 20230630 (2023-CNR0A00-0202310)

Oggetto: NOMINA DEL DIRETTORE DELL'ESECUZIONE DEL CONTRATTO RELATIVO ALLA FORNITURA DI UNA PIATTAFORMA DI MICROSCOPIA CONFOCALE SPETTRALE MULTIFOTONE NELL'AMBITO DEL PNRR PROGETTO I-PHOQS CUP B53C22001750006 CIG 9674985232 \_LEPORATTI

#### Educational experience

**Laurea (M.Sc. equivalent) in Physics, University of Genova (Italy) @ Genoa University, Department of Physics Via Dodecaneso 3, 16146 Genoa (Italy), Defence date: February 15, 1995.**

(October 1993-February 1995) Thesis in Biophysics:

"Polymeric Separated Phase in Monomolecular Films revealed by Scanning Force Microscopy" ("Fasi Polimeriche Separate in Films Polimerizzati rivelati dalla Microscopia a Scansione di Forza")

**Supervisor: Prof. Ranieri Rolandi, Referee: Prof. Martino Bolognesi.**

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**Scientific Lyceum "Nicoloso da Recco" Recco (Italy), Final Diploma Examination  
Date: July 28<sup>th</sup>, 1986.**

**PhD ("Dottorato") and Master Thesis ("Laurea Specialistica") tutor:**

**Tesi di Dottorato in Nanoscienze:**

- 1) **Daniele Vergara** “*IFN $\alpha$  Therapy in multiple sclerosis: biological and nano-mechanical response in peripheral blood mononuclear cells and astrocytes*” discussed on 15<sup>th</sup> September 2008.
- 2) **Viviana Vergaro** “*Development and characterisation of functional micro\nano-materials as tools for drug delivery*” discussed on 26<sup>th</sup> June 2012.

**Tesi di Dottorato in Fisica e Nanoscienze :**

- 3) **Mariafrancesca Cascione** “*Atomic Force Microscopy on Living Cells: Biomechanical Approach to Study Human Disease*” discussed on 13<sup>th</sup> October 2016.
- 4) **Nemany Abdelhamid Nemany Hanafy** “*Development and Production of Multifunctional Bio-Nano-engineered Drug Delivery Systems Loaded by TGF  $\beta$ 1 inhibitors for delivering into Hepatocellular Carcinoma Cells.*” discussed on 18<sup>th</sup> July 2017.

**Tesi di Dottorato in Nanotecnologia:**

- 5) **Francesca Persano** “*Nanocarriers development for the encapsulation of natural bioactive compounds and an HSP90 inhibitor in the treatment of malignant glioma*” discussed on 29<sup>th</sup> July 2022

**Tesi di Laurea in Biotecnologie Università degli Studi di Bari**

- 1) **Viviana Vergaro** “*Studio citomeccanico e morfostrutturale delle modificazioni indotte dalla biofunzionalizzazione del substrato e dal trattamento con resveratolo nella linea cellulare di carcinoma mammario MCF-7*” discussed on 24<sup>th</sup> July 2008.
- 2) **Ilaria Palamà** “*Sintesi e Validazione di Capsule Nanoingenierizzate per il Drug Delivery su Cellule Tumorali*” discussed on 12<sup>th</sup> December 2008.
- 3) **Claudia Bellomo** “*Validation of drug nanocolloids and polyelectrolyte capsules as novel carriers for controlled drug delivery into ovarian cancer*” discussed on 20<sup>th</sup> December 2010.

**Tesi di Laurea Specialistica in Biotecnologie Università del Salento**

- 1) **Simona Bettini** “*Caratterizzazione biochimico-fisica di oleosomi artificiali: proprietà all'interfaccia ari-acqua ed analisi morfologico-strutturale dei relativi film*” discussed on November 2008.
- 2) **Rosanna Pagano** “*Caratterizzazione biochimico-fisica di oleosomi purificati da specie vegetali: proprietà all'interfaccia ari-acqua ed analisi morfologico-strutturale dei relativi film*” discussed on November 2008.
- 3) **Flavia Scarlino** “*SVILUPPO DI MICROCARRIERS NANOINGEGNERIZZATI PER IL DELIVERY DI FARMACI ANTINEOPLASTICI IN CELLULE DI EPATOCARCINOMA*” discussed on 26<sup>th</sup> April 2010.

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

4)

**Carla Romano** "Sviluppo e validazione di halloysite nanotubes per il delivery di farmaci anticancro in cellule neoplastiche" discussed on 19th July 2010.

- 5) **Valentina Greco** "Sviluppo e caratterizzazione di nanoparticelle magnetiche rivestite di multistrati polimerici biodegradabili per il targeting di curcumina" discussed on 10<sup>th</sup> December 2013.
- 6) **Serena Mancarella** " SVILUPPO E CARATTERIZZAZIONE DI MICROCAPSULE NANO-INGEGNERIZZATE PER IL TARGETING TUMORALE DI RESVERATROLO" discussed on 10<sup>th</sup> December 2013.

**Tesi di Laurea Specialistica in Biologia applicata alla Biomedicina** Università di Pisa

**Chiara Dionisi** "Sviluppo e caratterizzazione di halloysite nanotubes per il delivery di farmaci antineoplastici in cellule tumorali" discussed on 21<sup>th</sup> July 2015.

**Tesi di Laurea Specialistica in Fisica**, Università del Salento

**Maria Francesca Cascione** "Caratterizzazione morfologica e citomeccanica di cellule tumorali mediante microscopia ottica ed a scansione di forza" discussed on 29<sup>th</sup> April 2012.

**Tesi di Laurea Triennale** in Biotecnologie Università del Salento

**Diletta Quarta Colosso** "Preparazione di microcapsule polimeriche per la veicolazione controllata di farmaci antitumorali" discussed on 9<sup>th</sup> December 2010.

**Progetto Italia Lavoro-Tirocinio Extracurriculare (Tutor)**

**Serena Mancarella** " SVILUPPO E CARATTERIZZAZIONE DI NANOPARTICELLE PER IL TARGETING TUMORALE DI POLIFENOLI" (1st April 2014-31 July 2014).

**Referee of Mr. Jiaying Yu** PhD Thesis "Functionalization of halloysite nanotubes for applications in catalysis, photocatalysis and drug delivery" from Università degli Studi di Padova, Dipartimento di Scienze Chimiche Science and Engineering of Materials and Nanostructures (SIMN) Cycle: XXIII, submitted on 05/11/2020

**Skills:**

**Languages:**

Italian (Mother Tongue)

English (very good spoken and written)

German (very good spoken and written).

**Computer:**

**McIntosh, PC's, Unix workstations, Vax-Vms.**

**Operative Systems:** Microsoft Windows Workgroup 3.1, 95, NT, 2000 Professional, XP Home Edition, VAX-Vms.

**Image Processing:** Fototouch, Photostyler Photoshop, Graphic Workshop, Image PC, NIH Image, Image Tool and Corel Draw.

**Scanning Probe Microscopy Image Processing:** Nanoscope II, Nanoscope III, Nanoscope IV, NanoScope V (Digital-Veeco Instruments Inc), Graphic Processor (GP2, GP3) (Advanced Surface Microscopy, Inc), Nanoview and Scanning Probe Image Processor (SPIP) (Image Metrology), Molecular Force Probe 3D Atomic Force Microscope Software (Igor Pro, Wavemetrics).

**Force Spectroscopy:** Molecular Force Probe (Asylum Research Inc.) Picoforce (Veeco Instr.)

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**Word processing:** Word, Wordstar, LateX.

**Data Processing:** Asystant, Excel, Origin and Igor Pro (Wavemetrics).

### **Hobby and Interests:**

Sports fan, Soccer, modern music (pop, rock, and other), puzzles, logic games.

### **Instruments:**

- **Scanning Probe Microscope** (Atomic Force Microscope (AFM) (Multimode, Picoforce, Bioscope I and II, Catalyst, Dimension 3100 Veeco Instr., USA) & Scanning Tunneling Microscope (STM) (Multimode STM Head, Veeco Instr., USA)
- **Molecular Force Probe** (MFP-1D, from Asylum Research Inc., USA)
- **Molecular Force Probe 3D Atomic Force Microscope** (MFP-3D, from Asylum Research Inc., USA)
- **Fluorescence and Optical Microscope** (Axiovert 135 and Axio Observer Z1 Zeiss, Germany, Olympus IX 70 and IX 71, Zeiss, Germany)
- **Confocal Laser Scanning Microscope** (Leica TCS SP5 2-Photon, TCS SP2 II Leica Microsystems GmbH, Germany, LSM 700 Zeiss, Germany)
- **Brewster Angle Microscope** (BAM1, NFT Göttingen, Germany)
- **Grazing Incidence X-ray Diffraction** (GIXD, Hasylab, Desy, Hamburg, Germany)
- **Small Angle Neutron Scattering** (SANS, Hahn-Meitner-Institut (HMI), Berlin, Germany)
- **Langmuir Troughs** (RCM2-T, Meyer Feintechnik, Göttingen; R&K, Berlin, Germany)
- **Evaporator** (High Vacuum, HV)
- **Electrochemical Cell**
- **Fluorescence Spectroscopy** (Fluorolog Spex).
- **Micromanipulator** (Nanoman Eppendorf, Germany)

### **Scientific activities:**

He has carried out research in the following fields:

- **Nanophysics at the air/water and the air/substrate interface**
- **Characterization of Langmuir and Langmuir-Blodgett mono- and multilayers**
- **Deposition of amphiphilic molecules (i.e. surfactant or lipids) on solid substrates (silicon wafers, mica, quartz and glass supports)**
- **Polymerization of Langmuir monolayers by UV light**
- **Characterization of organic thin films with Scanning Force Microscopy**
- **Evaporation of Gold onto glass and mica support**
- **Preparation and Characterization of Gold (111) with Scanning Probe Microscopy (AFM and STM)**
- **Electrochemical and Scanning Probe Microscopy Investigation of Self-assembled Monolayers onto Gold (111) substrates**
- **Study of the molecular structure of phospholipid monolayers by X-ray Synchrotron Diffraction**
- **Investigation of spin- cast and -coated alkane on SiO<sub>2</sub>/air interface by Atomic Force Microscopy**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- **Morphological investigation of Superconducting thick films grown by cryoelectrophoresis**
- **Characterization of biological nanostructure with Confocal Laser Scanning Microscopy and Scanning Force Microscopy**
- **Preparation and characterization of layer-by-layer (LbL) polyelectrolyte multilayers nanocapsules**
- **Investigation of the stability, elasticity and morphology of polymer capsules upon annealing by means of Scanning Force Microscopy and Confocal Laser Scanning Microscopy**
- **Fluorescence Spectroscopy of polyelectrolyte layers nanocapsules**
- **Molecular and Colloidal Force Spectroscopy**
- **Micromanipulation of Colloidal Microparticles**
- **Study of multilayer-coated and uncoated latex particles using Small Angle neutron Scattering (SANS)**
- **Investigation of polyelectrolyte multilayered coated and hollow particles by means of Small Angle Neutron Scattering (SANS)**
- **Investigation of polyelectrolyte multilayered- coated capsules templated on Red Blood Cells and Hollow Particles by means of Small Angle Neutron Scattering (SANS)**
- **Investigation of polyelectrolyte multilayer- and lipid- coated microparticles by Atomic Force Microscopy**
- **Investigation of biocompatible layer-by-layer assembled polyelectrolyte ultrathin films, microparticles and capsules by Scanning Force Microscopy**
- **Study of interaction forces between cellulose microspheres and cellulose ultrathin films-screening of potential wet strength agents for improving functional tissues properties**
- **Colloidal Probe Microscopy Investigation of Viscoelastic and Mechanical Properties of Macrophages upon Lipopolysaccharide Stimulation**
- **Scanning Force Microscopy Imaging and Force Mapping (Force Volume) for Cytomechanics and Morphostructure Investigation of Living and Fixed Cancer (Stem) Cells (MCF-7 human breast cancer cell, HeLa human adenocarcinoma cervical cancer cell, B104 rat neuroblastoma cell, HCC Hepatocarcinoma) and Neuronal Cells (SH-SY-5Y, Astrocytes).**
- **Development of multifunctional Nanocarriers (nanocolloids, nanocapsules and nanotubes) for intracellular delivery to Cancer (Stem) cells.**
- **Development of CAT Microscopy: Confocal-Atomic Force -Total Internal Reflection Fluorescence Microscopy**

#### Awards:

- **Grants for participating to XIV Congresso della Società Italiana di Biofisica Pura ed Applicata (SIPBA) Genova (Italy) 24-26 September 1998.**
- **Stefano Leporatti, Andreas Voigt, Rita Mitlöhner, Gleb B. Sukhorukov, Edwin Donath, Helmuth Möhwald " Scanning Force Microscopy Investigation of Polyelectrolyte Nano-and Microcapsules Wall Texture " Langmuir 16, 4059 (2000) (Article awarded by the Color Cover Issue).**

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

-**Lars Dähne, Stefano Leporatti, Edwin Donath, Helmuth Möhwald** "Fabrication of micro reaction cages with tailored properties" *J. Am. Chem. Soc.* 123, 23, 5431-5436 (2001) (Article published by Journal Permission with color figures without fees in web and printed edition).

- **Zhifei Dai, Andreas Voigt, Stefano Leporatti, Edwin Donath, Helmuth Möhwald** "Layer-by-layer Self-assembly of Charged Macromolecules and Aqueous Insoluble Low Molecular Weight Species into Capsules" *Adv. Mat.* 13, 17, 1339-1342 (2001) (Article awarded by the Color Cover Issue).

- **Xiping Qiu, Stefano Leporatti, Edwin Donath, Helmuth Möhwald** "Studies on the drug release properties of polysaccharide multilayers encapsulated ibuprofen microcapsules" *Langmuir* 17, 5375-5380 (2001). (Article cited and awarded with a colour image in Editor's Choice, Science vol. 293, August 24<sup>th</sup>, 2001)

- **Irina Estrela-Lopis, Stefano Leporatti, Daniel Clemens, Edwin Donath** "Polyelectrolyte multilayer hollow capsules studied by small-angle neutron scattering (SANS)" *Soft Matter*, 2009, 5, 214–219. (Awarded as Hot Paper, Editor suggestion).

- **S. Leporatti, D. Vergara, A. Zacheo, V. Vergaro, G. Maruccio, R. Cingolani, R. Rinaldi** "Cytomechanical and topological investigation of MCF-7 cells by scanning force microscopy" *Nanotechnology* 20 (2009) 055103 (6pp) (doi:10.1088/0957-4484/20/5/055103). (Paper of the month, Cover Page Issue and included in Highlights of 2009 collection of Nanotechnology: <http://herald.iop.org/nanohighlights/m63/ljc/301274/link/3326>).

- **Viviana Vergaro, Elshad Abdullayev, Yuri M. Lvov, Andre Zeitoun, Roberto Cingolani, Ross Rinaldi and Stefano Leporatti** "Cytocompatibility and Uptake of Halloysite Clay Nanotubes" *Biomacromolecules* (2010) 11, pp. 820–826. (Highly Cited Paper, awarded by ISI Web of Science: As of September/October 2015, this highly cited paper received enough citations to place it in the top 1% of its academic field based on a highly cited threshold for the field and publication year).

- **Nemany A. Hanafy, Concetta Nobile, Maria Luisa De Giorgi, Bhavna Rani, Yuan Cao, Gianluigi Giannelli and Stefano Leporatti** "LY2157299-Loaded Carriers Inhibiting Wound Healing in Hepatocellular Carcinoma" *European Biotechnology Congress 2014, Lecce 15<sup>th</sup> -18<sup>th</sup> May 2014 (Oral Communication, Awarded as Third EBTN Best Oral Presentation)*

- **Short Term Mobility Program, CNR Award: Bursary Grant to Stay @ Group of Prof. Mauro Ferrari @ Methodist Hospital Research Institute, Department of Nanomedicine, Houston, TX (USA) (17<sup>th</sup> October 2014-7<sup>th</sup> November 2014) Theme "Cytomechanical investigation of Pancreatic Cancer Cells by Scanning Force Microscopy"**

- **Serena Mancarella, Valentina Greco, Francesca Baldassarre, Daniele Vergara, Michele Maffia, Stefano Leporatti** "Polymer-coated Magnetic Nanoparticles for Curcumin Delivery to Cancer Cells" *Macromolecular Bioscience*, 2015 15,1365-1374, DOI:10.1002/mabi.201500142. (Awarded by Colour Frontispiece of 10/2015 Issue)

Prof. Stefano Loporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- **ICL Registration Boursary Grant for participating to EASL Conference Barcelona awarded to Nemany A. Hanafy for ePoster and Poster Paper Presentation** of "ENCAPSULATION OF SHT-DNA, SIRNA AND POLYPEPTIDE -17 INSIDE HYBRID POLYMERIC NANO-PROTEIN FOLIC ACID (HPNP-FA) CARRIER AS TARGETED TGFB INHIBITOR FOR HEPATOCELLULAR CARCINOMA **Nemany A. N. Hanafy, Alessandra Quarta, Riccardo Di Corato, Luciana Dini, Concetta Nobile, Maria Luisa De Giorgi, Vittorianna Tasco, Sonia Carallo, Mariafrancesca Cascione, Rosaria Rinaldi, Isabel Fabregat and Stefano Loporatti @ EASL Conference, Barcelona 13th-17th April 2016.**

- **Short Term Mobility Program, CNR Award: Bursary Grant to Stay at Group of Prof. Josè Toca-Herrera @ Department of Nanobiotechnology, Institute for Biophysics @ BOKU (University of Natural Resources and Life Sciences)** (15th January 2018-5th February 2018) Theme "Scanning Force Microscopy investigation of cancer cells".

**Abdel-Majeed Safer, Stefano Loporatti, Jacquilion Jose, Mahmoud S. Soliman**  
"Conjugation of EGCG and Chitosan NPs as a novel Nano-Drug Delivery System" International Journal of Nanomedicine 2019;14 8033–8046. (**Awarded Publication by Kuwait University**)

**Short Term Mobility Program, CNR Award: Bursary Grant to Stay at Group of Prof. Josè Toca-Herrera @ Department of Nanobiotechnology, Institute for Biophysics @ BOKU (University of Natural Resources and Life Sciences)** (October-November 2020) (**post-pone due to COVID pandemic**) Theme "Scanning Force Microscopy investigation of brain cancer cells".

**Guest Professorship Award of Department of Nanobiotechnology, BOKU (University of Natural Resources and Life Sciences) @ Group of Prof. Josè Toca-Herrera**, Director of Institute for Biophysics (1<sup>st</sup> June 2020-30<sup>th</sup> June 2024) for performing Teaching Course: **Nanomedicine and techniques of analysis at the nanoscale** (2CFU,10 hours) and working on " Scanning Probe Techniques to the investigation of Biomechanics of cells."

**F Persano, S Batasheva, GI Fakhrullina, G Gigli, S Loporatti, RF Fakhrullin** "Recent Advances in the Design of Inorganic and Nano-Clays Particles for the Treatment of Brain Disorders "Journal of Materials Chemistry B (2021), 9(12) 2726. <https://doi.org/10.1039/D0TB02957B>. (**Awarded by Colour Frontispiece of 01/04/2021 Issue**)

**Certificate of Recognition for Reviewing Activity in 2015-2016 from ACS Publications, American Chemical Society.**

**Certificate of Recognition for Reviewing Activity in 2017-2018 from ACS Publications, American Chemical Society.**

**Outstanding Contribution in Reviewing, December 2016** from *Journal of Controlled Release*, Elsevier.

**Outstanding Reviewer Awards 2017, of Nanotechnology from IOP Publishing.**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**Top Peer Reviewer 2019 (Powered by Publons)** for placing in the top 1% of Cross-Field on Publons global reviewer database, determined by the number of peer review reports performed during 2018-19 award year (The Top Peer Reviewer Award is part of the Global Peer Review Awards-honoring the elite contributions of scholarly peer review and editorial pursuits internationally).

**Top 2 % Scientists year 2024:** Main Field: **Physics & Astronomy**; Sub Field: **Chemical Physics**; Rank in the SubField: 1405 out of 106831 authors (The data is verified and sourced by ELSEVIER and Stanford University's Top 2% Scientists List.

#### Scientific stays:

Group of **Prof. Dr. H-J Butt** (Max Planck Institute for Biophysik, Frankfurt am Main) working on "Evaporation of ultraflat monocrystalline gold (111)" 29<sup>th</sup>–30<sup>th</sup> May 1996.

**Hasylab Desy, Hamburg (Beamline BW1)** working on "Grazing Incidence X-ray Diffraction on phospholipid monolayers at the air/water interface" 24<sup>th</sup>–26<sup>th</sup> February 1999.

**Hahn-Meitner-Institut (HMI)**, Berlin working on "Small Angle Neutron Scattering on multilayered-coated and uncoated latex particles", 10<sup>th</sup>–13<sup>th</sup> April 2000.

**Hahn-Meitner-Institut (HMI)**, Berlin working on "Small Angle Neutron Scattering on polyelectrolyte multilayered coated and hollow particles", 13<sup>th</sup>–17<sup>th</sup> December 2001.

**Hahn-Meitner-Institut (HMI)**, Berlin working on "Small Angle Neutron Scattering on polyelectrolyte multilayered-coated Red Blood Cells and hollow particles", 19<sup>th</sup>–21<sup>st</sup> December 2003.

Group of **Prof. Mauro Ferrari @ Methodist Hospital Research Institute**, Department of Nanomedicine, Houston, TX (USA) (17<sup>th</sup> October 2014–7<sup>th</sup> November 2014) Theme "Cytomechanical investigation of Pancreatic Cancer Cells by Scanning Force Microscopy" (**Short Term Mobility Program, CNR Award**)

Group of **Prof. Josè Toca-Herrera @ Department of Nanobiotechnology**, The Institute for Biophysics @ **BOKU (University of Natural Resources and Life Sciences)** (15<sup>th</sup> January 2018–4<sup>th</sup> February 2018) Theme "Scanning Force Microscopy investigation of cancer cells" (**Short Term Mobility Program, CNR Award**)

Group of **Prof. Josè Toca-Herrera @ Department of Nanobiotechnology**, at The Institute for Biophysics @ **BOKU (University of Natural Resources and Life Sciences)** (20<sup>th</sup> October 2020–9<sup>th</sup> November 2020) Theme "Scanning Force Microscopy investigation of brain cancer cells" (**Short Term Mobility Program, CNR Award (postponed due to COVID pandemic: October 2022–November 2022)**)

**Guest Professorship Award of Department of Nanobiotechnology, BOKU (University of Natural Resources and Life Sciences) @ Group of Prof. Josè Toca-Herrera**, Director of Institute for Biophysics (1<sup>st</sup> June 2020–30<sup>th</sup> June 2024) for performing Teaching Course: **Nanomedicine and techniques of analysis at the nanoscale** (2CFU,10

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

hours) and working on " Scanning Probe Techniques to the investigation of Biomechanics of cells."

### Publications in Peer-Reviewed Journals

#### **1) S. Leporatti, O. Cavalleri, R. Rolandi, P. Tundo**

" *Polymeric Separated Phase in Monomolecular Films revealed by Scanning Force Microscopy "* *Langmuir* 10 (1994) 1334 - 1336.

#### **2) R. Rolandi, S. Dante, A. Gussoni, S. Leporatti, L. Maga, P. Tundo**

" *Polymerized Monomolecular Films: Microscopic Structure, Viscosity and Photopolymerization Kinetics "* *Langmuir* 11 (1995) 3119 - 3129.

#### **3) L. Basano, S. Leporatti, P. Ottonello, V. Palestini, R. Rolandi**

" *Measurements of surface roughness: use of CCD camera to correlate doubly speckle patterns "* *Applied Optics* vol. 34, No 31, 1<sup>st</sup> Nov. 1995, 7286-7290.

#### **4) G. Caminati, D. Berti, G. Gabrielli, S. Leporatti, R. Rolandi, M. G. Ponzi – Bossi, B. Yang**

" *Structural characterization of Langmuir-Blodgett films of nickel complexes with amphiphilic compounds "* *Thin Solid Films* vol. 284 - 285, (1996), 181 - 186.

#### **5) R. Eggenhoffner, A. Tuccio, R. Masini, A. Diaspro, S. Leporatti, R. Rolandi**

" *Oriented YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7- $\square$</sub>*  thick films grown by cryo-electrophoresis " *Superconducting Science and Technology* 10 (1997) 142-146.

#### **6) S. Leporatti, S. Akari, F. Bringezu, G. Brezesinski, H. Möhwald**

" *Triple chain phospholipid monolayers: a scanning force microscopy and grazing incidence X-ray diffraction study "* *Applied Physics A Material Science & Processing* 66, S1245-S1249, Part 2 Suppl. 5<sup>th</sup> March 1998.

#### **7) C. DeWolf, S. Leporatti, C. Kirsch, R. Klinger, G. Brezesinski**

" *Phase separation in phosphatidylinositol/phosphatidylcoline mixed monolayers "* *Chemistry and Physics of Lipids* 97 (1999) 129-138.

#### **8) S. Leporatti, F. Bringezu, G. Brezesinski, H. Möhwald**

" *Condensed Phases of Branched-Chain Phospholipid Monolayers investigated by Scanning Force Microscopy "* *Langmuir* 14 (1998) 7503-7510.

#### **9) S. Leporatti, G. Brezesinski, H. Möhwald**

" *Separated Phases of Branched-Chain Phospholipid Monolayers revealed by Scanning Force Microscopy "* *Colloids and Surfaces A* 161 (2000) 159-171.

#### **10) A. Holzwarth, S. Leporatti, H. Riegler**

" *Molecular ordering and domain morphology of molecularly thin triacetane films at SiO<sub>2</sub>/air interface"* *Europhysics Letters* 52, (2), 653-659 (2000).

#### **11) Stefano Leporatti, Andreas Voigt , Rita Mitlöhner, Gleb B. Sukhorukov, Edwin Donath, Helmut Möhwald**

" *Scanning Force Microscopy Investigation of Polyelectrolyte Nano- and Microcapsules Wall Texture "* *Langmuir* 16, 4059 (2000) (**Article awarded by the Color Cover Issue**).

#### **12) Igor L. Radchenko, Gleb B. Sukhorukov, Stefano Leporatti, Gennady B. Khomutov, Edwin Donath, Helmut Möhwald**

" *Assembly of alternated multicharged-ion/polyelectrolyte layers on colloid particles. Stability of multilayers and encapsulation of macromolecules into polyelectrolyte capsules "* *J. Coll. Int. Sci.* 230, 272 (2000).

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**13) G. B. Sukhorukov, S. Davis, A .S. Susha, S. Leporatti, E. Donath, J. Hartmann, H. Möhwald**

"Hollow polyelectrolytes shells as template for precipitation of inorganic materials in confined geometry " *J. Coll. Int. Sci.* 247, 251 (2002).

**14) R. Georgieva, S. Moya, G. Reichle, S. Leporatti, B. Neu, H. Bäumler, E. Donath, H. Möhwald**

"Conductance and capacitance of polyelectrolyte and lipid-polyelectrolyte composite capsules as measured by electrorotation " *Langmuir* 16,7075-7081 (2000).

**15) S. Moya, L. Dähne, A. Voigt, S. Leporatti, E. Donath, H. Möhwald**

" Polyelectrolyte Multilayer Capsules Templated on Biological Cells: Core Oxidation influences Layer Chemistry" *Colloids and Surfaces A* 183-185, 27-40 (2001).

**16) Stefano Leporatti, Changyou Gao, Andreas Voigt, Edwin Donath, Helmuth Möhwald**

" Shrinking of Ultrathin Polyelectrolyte Multilayer Capsules upon Annealing: a Confocal Laser Scanning Microscopy (CLSM) and Scanning Force Microscopy (SFM) study " *Eur. Phys. J. E* 5,13-20 (2001).

**17) Changyou Gao, Stefano Leporatti, Edwin Donath, Helmuth Möhwald**

" Surface texture of Poly(styrenesulfonate sodium salt) and Poly(diallyldimethyl ammonium chloride) Micron-sized capsules " *J. Phys. Chem B* 104, 7144-7149 (2000).

**18) Changyou Gao, Stefano Leporatti, Sergio Moya, Edwin Donath, Helmuth Möhwald**

" Stability and mechanical properties of polyelectrolyte capsules obtained stepwise by assembly of poly(styrenesulfonate sodium salt) and poly(diallyldimethyl ammonium) chloride onto melamine resin particles " *Langmuir* 17, 11, 3491-3495 (2001).

**19) B. Neu, A. Voigt, R. Mitlöner, S. Leporatti, E. Donath, C. Gao, H. Kiesewetter, H. Möhwald, H. J. Meiselman, H. Bäumler**

" Biological Cells as Templated for Hollow Microcapsules " *J. of Microenc.* 18, 3, 385-395 (2001).

**20) Lars Dähne, Stefano Leporatti, Edwin Donath, Helmuth Möhwald**

" Fabrication of micro reaction cages with tailored properties " *J. Am. Chem. Soc.* 123, 23, 5431-5436 (2001) (**Article published by Journal Permission with color figures without fees in web and printed edition**).

**21) Andreas Voigt, Norbert Buske, Gleb B. Sukhorukov, Alexei A. Antipov, Stefano Leporatti, Hans Bäumler, Edwin Donath, Helmuth Möhwald**

" Novel Polyelectrolyte multilayer micro- and nanocapsules as magnetic carriers" *J. of Magn. & Magn. Mat.* 225, 59-66 (2001).

**22) A.A. Antipov, G. B. Sukhorukov, S. Leporatti, I.L. Radchenko, E. Donath, H. Möhwald**

" Polyelectrolyte Multilayer Capsules Permeability Control " *Coll. & Surf. A* Vol. 198-200 (18 February), 535-561 (2002).

**23) H. Möhwald, H. Lichtenfeld, S. Moya, A. Voigt, G.B. Sukhorukov, S. Leporatti, L. Dähne, A. Antipov, C.Y. Gao, E. Donath**

" From polymeric films to nanocapsules " *Studies in Surface science and Catalysis* 132, Elsevier Science B.V., Y. Iwasa, N. Oyama, H. Kunieda (Eds.) 485-490 (2001).

**24) B.-D. Jung, J-D Hong, A. Voigt, S. Leporatti, L. Dähne, E. Donath, H. Möhwald**

" Photochromic Hollow Shells: Photoisomerization of Azobenzene Polyionen in Solution, in Multilayer Assemblies on Planar and Spherical Surface " *Coll. & Surf. A* Vol. 198-200 (8<sup>th</sup> February ) 483-489 (2002).

**25) Zhifei Dai, Andreas Voigt, Stefano Leporatti, Edwin Donath, Helmuth Möhwald**

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

"Layer-by-layer Self-assembly of Charged Macromolecules and Aqueous Insoluble Low Molecular Weight Species into Capsules" *Adv. Mat.* 13, 17, 1339-1342 (2001) (Article awarded by the Color Cover Issue).

**26) Xiping Qiu, Stefano Leporatti, Edwin Donath, Helmuth Möhwald**

"Studies on the drug release properties of polysaccharide multilayers encapsulated ibuprofen microcapsules" *Langmuir* 17, 5375-5380 (2001). (Article cited and awarded with a colour image in Editor's Choice, Science vol. 293, August 24<sup>th</sup> 2001)

**27) Z. Dai, H. Zastrow, S. Leporatti, E. Donath, H. Möhwald, B. Peng**

"Synthesis and encapsulation of N,N,N',N'-Tetrakis[*p*-di(*n*-butyl) aminophenyl]-*p*-benzoquinone-bis(imonium hexafluoroantimonate" *J. Disper. Sci. Technol.* 23 (2002) 555-562.

**28) Irina Estrela-Lopis, Stefano Leporatti, Sergio Moya, Astrid Brandt, Edwin Donath, Helmut Mohwald**

"SANS Studies of Polyelectrolyte Multilayers on Colloidal Templates" *Langmuir* (2002) 18, 7861-7866.

**29) H. Möhwald, H. Lichtenfeld, S. Moya, A. Voigt, G. B. Sukhorukov, S. Leporatti, L. Dähne, I. Radtchenko, A. A. Antipov, C. Gao, E. Donath** "From polymeric films to nanocapsules". In "Adsorption and aggregation of surfactants in solution", Marcel Dekker, New York, (Eds. K. L. Mittal, D. O. Shah) 91-104 (2002).

**30) Changyou Gao, Stefano Leporatti, Sergio Moya, Edwin Donath, Helmuth Möhwald**

"Swelling and Shrinking of Polyelectrolyte Microcapsules in Response to Changes in Temperature and Ionic Strength" *Chemistry Eur. J.* (2003) vol. 9, Issue 4, 915-920.

**31) S. Moya, W. Richter, S. Leporatti, H. Bäumler, E. Donath**

"Freeze-Fracture Electron Microscopy of Lipid Membranes on Colloidal Polyelectrolyte Multilayer Coated Supports" *Biomacromolecules* (2003) 4(3), 808-814.

**32) Sabine Hiller, Stefano Leporatti, Andreas Schnäckel, Elke Typlt, Edwin Donath**

"Protamine Assembled in Multilayers on Colloidal Particles Can Be Exchanged and Released" *Biomacromolecules* (2004), 5, 1580-1587.

**33) Stefano Leporatti, Ronny Sczech, Hans Riegler, Stefano Bruzzano, Joachim Storsberg, Fritz Loth, Werner Jaeger, Andre' Laschewsky, Stephan Eichhorn, Edwin Donath**

"Interaction Forces Between Microspheres and Ultrathin Cellulose Films monitored by Colloidal Probe Microscopy-Effect of Wet Strength Agents" *J. Colloid and Interface Science* (2005) vol 281/1, 101-111.

**34) Stefano Leporatti, Anja Gerth, Guido Köhler, Bernd Kohlstrunk, Sunna Hauschildt, Edwin Donath**

"Elasticity and Adhesion Force of Resting and Lipopolysaccharide (LPS)-stimulated Macrophages" *FEBS Letters* vol 580, Issue 2, 450 (2006).

**35) G. Koehler, S. E. Moya, S. Leporatti, Ch. Bitterlich, E. Donath**

„Stability and fusion of lipid layers on polyelectrolyte multilayer supports studied by colloidal force spectroscopy" *Eur. Biophys. J. with Biophys. Lett.* 36, 4, 337 (2007).

**36) Irina Estrela-Lopis, Stefano Leporatti, Elke Typlt, Daniel Clemens, Edwin Donath**

„Small Angle Neutron Scattering Investigations (SANS) of Polyelectrolyte Multilayer Capsules Templatized on Human Red Blood Cells" *Langmuir* 23, 7209 (2007).

**37) M. Fischlechner, U. Reibetanz, M. Zaulig, D. Enderlein, J. Romanova, S. Leporatti, S. Moya, E. Donath**

„Fusion of Enveloped Virus Nanoparticles with Polyelectrolyte-Supported Lipid Membranes for the Design of Bio/Nonbio Interfaces" *Nano Lett.* 7(11), 3540 (2007).

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**38) Stefano Leporatti** “Atomic Force Microscopy in colloidal and biological systems” Invited Review in **“Biomimetics in Biophysics: model Systems, experimental techniques and Computation”** (Research Signpost Publisher, Kerala, India, [www.ressign.com](http://www.ressign.com)) pagg. 67-87 ISBN: 978-81-308-0385-2 Editor: José L. Toca-Herrera. (2010).

**39) Irina Estrela-Lopis, Stefano Leporatti, Daniel Clemens, Edwin Donath**  
“Polyelectrolyte multilayer hollow capsules studied by small-angle neutron scattering (SANS) “Soft Matter, 2009, 5, 214–219. (**Hot Paper, Editor suggestion**).

**40) S. Leporatti, D. Vergara, A. Zacheo, V. Vergaro, G. Maruccio, R. Cingolani, R. Rinaldi** “Cytomechanical and topological investigation of MCF-7 cells by scanning force microscopy” Nanotechnology 20 (2009) 055103 (6pp) (doi:10.1088/0957-4484/20/5/055103). (**Paper of the month, Cover Page Issue and included in Highlights of 2009 collection of Nanotechnology:** <http://herald.iop.org/nanohighlights/m63/ljc/301274/link/3326>).

**41) D. Vergara, R. Martignago, S. Leporatti, S. Bonsegna, G. Maruccio, F. De Nuccio, A. Santino, R. Cingolani, G. Nicolardi, M. Maffia, R. Rinaldi** “Biomechanical and proteomic analysis of INF-beta-treated astrocytes” Nanotechnology Vol. 20, Iss. 45, 455106 (2009).

**42) Ilaria Elena Palamà, Addolorata Maria Luce Coluccia, Antonio della Torre, Viviana Vergaro, Elisabetta Perrone, Roberto Cingolani, Ross Rinaldi and Stefano Leporatti** “Multilayered Polyelectrolyte Capsules and Coated Colloids: Cytotoxicity and Uptake by Cancer Cells”. Science of Advanced Materials (2010) Vol. 2, No. 2, pp. 138–150. (Part of 2010 Special Issue: “Advanced Materials for Technological and Biomedical Applications”)

**43) Ilaria E Palama, Stefano Leporatti, Emanuela de Luca, Nicola Di Renzo, Michele Maffia, Carlo Gambacorti-Passerini, Ross Rinaldi, Giuseppe Gigli, Roberto Cingolani, Addolorata ML Coluccia** “IMATINIB-LOADED POLYELECTROLYTE MICROCAPSULES FORSUSTAINED TARGETING OF BCR-ABL+ LEUKEMIA STEM CELLS” Nanomedicine Future Medicine Ltd (2010) 5(3), pp. 419-431.

**44) Viviana Vergaro, Elshad Abdullayev, Yuri M. Lvov, Andre Zeitoun, Roberto Cingolani, Ross Rinaldi and Stefano Leporatti** “Cytocompatibility and Uptake of Halloysite Clay Nanotubes” Biomacromolecules (2010) 11, pp. 820–826. (**Highly Cited Paper, ISI Web of Science:** As of September/October 2015, this highly cited paper received enough citations to place it in the top 1% of its academic field based on a highly cited threshold for the field and publication year).

**45) Stefania Bonsegna, Simona Bettini, Rosanna Pagano, Antonella Zacheo, Viviana Vergaro, Giovanna Giovinazzo, Gabriella Caminati, Stefano Leporatti, Ludovico Valli and Angelo Santino** “Plant Oil Bodies: Novel Carriers to Deliver Lipophilic Molecules” Appl. Biochem. Biotechnol. 163(6), 792-802 (2011) (DOI 10.1007/s12010-010-9083-0).

**46) V. Vergaro, F. Scarlino, C. Bellomo, R. Rinaldi, D. Vergara, M. Maffia, F. Baldassarre, G. Giannelli X. Zhang, Y. M. Lvov and S. Leporatti** “Drug-loaded polyelectrolyte microcapsules for sustained targeting of cancer cells” Advanced Drug Delivery Review, (2011) 63, 847-864.

**47) Vergaro Viviana, Abdullayev Elshad, Lvov Yuri M. and Leporatti Stefano** “Halloysite clay nanotubes: Novel carriers for cancer therapy” ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY , Vol. 241, Meeting Abstract: 395-PMSE, MAR 27 2011.

**48) Vergaro Viviana, Zheng Zhiguo, Zhang Xingcai, Lvov Yuri M. and Leporatti Stefano** “Nanocarriers for cancer therapy” ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, Vol. 241, Meeting Abstract: 321-PMSE , MAR 27 2011.

**49) D. Vergara, C. Bellomo, X. Zhang, V. Vergaro, A. Tinelli, V. Lorusso, R. Rinaldi, Y. M. Lvov, S. Leporatti, and M. Maffia** “Lapatinib/Paclitaxel Polyelectrolyte Nanocapsules for

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

*Overcoming Multidrug Resistance in Ovarian Cancer" Nanomedicine: Nanotechnology, Biology and Medicine (NBM), 8, 891-899 (2012).*

**50)** D. Vergara, P. Simeone, D. Toraldo, P. del Boccio, V. Vergaro, S. Leporatti, D. Pieragostino, A. Tinelli, S. De Domenico, S. Alberti, A. Urbani, M. Salzet, A. Santino, and M. Maffia "Resveratrol downregulates Akt/GSK and ERK signalling pathways in OVCAR-3 ovarian cancer cells" Molecular BioSystems 8, 1078-1087 (2012).

**51)** F. Baldassarre, V. Vergaro, F. Scarlino, F. De Santis, G. Lucarelli, A. della Torre, G. Ciccarella, R. Rinaldi, G. Giannelli, and S. Leporatti "Polyelectrolyte Capsules as Carriers for Growth Factor Inhibitor Delivery to Hepatocellular Carcinoma" Macromol Biosci, 12, 656-665 (2012) DOI: 10.1002/mabi.201100457.

**52)** V. Vergaro, F. Baldassarre, F. De Santis, , G. Ciccarella, G. Giannelli, and S. Leporatti "TGF-Beta Inhibitor Loaded Polyelectrolyte Multilayers Capsules for Sustained Targeting of Hepatocarcinoma cells" Invited Review Current Pharmaceutical Design 18, 27, 4155-4164 (2012).

**53)** A. Mazzocca, F. Baldassarre, V. Vergaro, S. Leporatti, G. Ciccarella, S. Antonaci, G. Giannelli "LY2109761-LOADED MICROCAPSULES AS DRUG DELIVERY SYSTEM TO INHIBIT THE TGF-B1 PATHWAY IN HEPATOCELLULAR CARCINOMA" Journal of Hepatology, Vol. 56, Suppl. 2, April 2012, Page S115.

**54)** Viviana Vergaro, Yuri M. Lvov and Stefano Leporatti "Halloysite Clay Nanotubes for Resveratrol Delivery to Cancer Cells" Macromolec. Biosci. 12, 9 pp. 1265-1271 (2012), DOI: 10.1002/mabi.201200121.

**55)** Bianco M, Aloisi A, Arima V, Capello M, Ferri-Borgogno S, Novelli F, Leporatti S, Rinaldi R "Quartz Crystal Microbalance with Dissipation (QCM-D) as tool to exploit antigen-antibody interactions in pancreatic ductal adenocarcinoma detection" Biosens. and Bioelectron. 2013, 42, , 646-652.

**56)** Maria Serena Chiriacò, Elisabetta Primiceri, Anna Grazia Monteduro, Anna Bove, Stefano Leporatti, Michela Capello, Sammy Ferri-Borgogno, Ross Rinaldi, Francesco Novelli, Giuseppe Maruccio "Towards pancreatic cancer diagnosis by EIS biochips" Lab on Chip 2013,13, 730-734.

**57)** Nunzio Denora, Valentino Laquintana, Antonio Lopalco, Rosa Maria Iacobazzi, Angela Lopedota, Annalisa Cutrignelli, Giuliano Iacobellis, Cosimo Annese, Maria Francesca Cascione, Stefano Leporatti, and Massimo Franco "In vitro targeting and imaging the translocator protein TSPO 18-kDa through G(4)-PAMAM-FITC labeled dendrimers" J. Contr. Rel. 2013, 172, 1111-1125.

**58)** Giulia Soloperto, Francesco Conversano, Antonio Greco, Ernesto Casciaro, Andrea Ragusa, Aime' Lay-Ekuakille, Stefano Leporatti, Sergio Casciaro "Assessment of the Enhancement Potential of Halloysite Nanotubes for Echographic Imaging" proceedings of IEEE MeMeA 2013 conference, pp. 30 -34, 2013.

**59)** Giulia Soloperto, Francesco Conversano, Antonio Greco, Ernesto Casciaro Andrea Ragusa, Aime' Lay-Ekuakille, Stefano Leporatti, Sergio Casciaro "Multiparametric Evaluation of the Acoustic Behaviour of Halloysite Nanotubes for Medical Echographic Image Enhancement" IEEE Transactions on Instrumentation and Measurement, Vol, 63 Issue: 6 Pag.1423-1430, 2014.

**60)** Loretta Laureana del Mercato, Marzia Maria Ferraro, Francesca Baldassarre, Serena Mancarella, Valentina Greco, Ross Rinaldi and Stefano Leporatti "Biological Applications of LbL Multilayer Capsules: From Drug Delivery to Sensing" Advances Colloids and Interface Science (Invited Review, Special Issue Helmuth Mohwald) 207 (2014) 139–154.

**61)** Daniele Vergara,Pasquale Simeone, Dominga Latorre, Cascione Mariafrancesca, Stefano Leporatti, Marco Trerotola, Anna Maria Giudetti,

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- Loredana Capobianco, Paola Lunetti, Antonia Rizzello, Rosaria Rinaldi, Saverio Alberti, Michele Maffia** “Proteomics analysis of E-Cadherin knockdown in epithelial breast cancer cells” J. Biotechnology Special Issue EuroBiotech (2015) 22, pag. 3-11. <http://dx.doi.org/10.1016/j.biotec.2014.10.034>.
- 62) Daniele Vergara, Marzia M Ferraro, Mariafrancesca Cascione, Loretta L del Mercato, Stefano Leporatti; Anna Ferretta, Paola Tanzarella, Consiglia Pacelli, Angelo Santino, Michele Maffia, Cocco Tiziana, Rosaria Rinaldi, Antonio Gaballo** “Cytoskeletal alterations and biomechanical properties of parkin- mutant human primary fibroblasts” 2014, Cells Biochemistry and Biophysics (CBBI), (2015) 71(3), Pag. 1395-1404, DOI: 10.1007/s1213-014-0362-1.
- 63) Nemany Hanafi, Concetta Nobile, Maria Luisa De Giorgi , Ross Rinaldi and Stefano Leporatti** “Control of Colloidal CaCO<sub>3</sub> suspension by using biodegradable polymers during fabrication” Beni-Suef University Journal of Basic and Applied Sciences. 4 (2015) pag. 60-70; <http://dx.doi.org/10.1016/j.bjbas.2015.02.009>.
- 64) Nemany Hanafy, Concetta Nobile, Maria Luisa De Giorgi, Bhavna Ran, Yuan Cao, Ross Rinaldi, Gianluigi Giannelli and Stefano Leporatti** “LY2157299-Loaded Carriers Inhibiting Wound Healing in Hepatocellular Carcinoma” Conference: European Biotechnology Congress Location: Lecce, ITALY Date: MAY 15-18, 2014 JOURNAL OF BIOTECHNOLOGY Volume: 185 Supplement: S Pages: S28-S28 Published: SEP 2014 .
- 65) Giuseppe Ciccarella, Agostina L Capodilupo, Viviana Vergaro, Francesca Baldassarre, Antonio Cardone, Giuseppina A Corrente, Claudia Carlucci, Stefano Leporatti, Paride Papadia, Giuseppe Gigli** “Thiophene-based fluorescent probes with low cytotoxicity and high photostability for lysosomes in living cells” BBA-General Subjects (2015), 1850, 3885-392.
- 66) Sergio Casciaro, Giulia Soloperto, Francesco Conversano, Ernesto Casciaro, Antonio Greco, Stefano Leporatti, Aimè Lay-Ekuakille, Giuseppe Gigli** “Automatic Image Detection of Halloysite Clay Nanotubes as Future Ultrasound Theranostic Agent for Tumoral Cell Targeting and Treatment” Conference Record - IEEE Instrumentation and Measurement Technology Conference 6860878, pp. 927-930.
- 67) F. Chiriacò, F. Conversano, E.A. Sbenaglia, S. Casciaro, S. Leporatti, A. Lay-Ekuakille** “Cytotoxicity Measurements of Halloysite Nanotubes for Nanomedicine Applications” EEE MeMeA 2014 - IEEE International Symposium on Medical Measurements and Applications, Proceedings 68600126.
- 68) Chiara Dionisi, Nemany A.N. Hanafy, Concetta Nobile, Maria Luisa de Giorgi, Ross Rinaldi, Sergio Casciaro, Yuri M. Lvov and Stefano Leporatti** “Halloysite Clay Nanotubes as Carriers for Curcumin Delivery” IEEE Transactions On Nanotechnology 2016.
- 69) Nemany Hanafi, Maria Luisa De Giorgi, Concetta Nobile, Mariafrancesca Cascione, Ross Rinaldi and Stefano Leporatti** ”CaCO<sub>3</sub> rods as chitosan-polygalacturonic acid carriers for bromopyruvic acid delivery ” Science of Advanced Materials (SAM) 8, 514-523 (2016).
- 70) Serena Mancarella, Valentina Greco, Francesca Baldassarre, Daniele Vergara, Michele Maffia, Stefano Leporatti** “Polymer-coated Magnetic Nanoparticles for Curcumin Delivery to Cancer Cells” Macromolecular Bioscience, 2015 15,1365-1374, DOI:10.1002/mabi.201500142. (Awarded by Frontispiece of 10\2015 Issue)
- 71) N.A.N. Hanafy, M.L. De Giorgi, C. Nobile, G. Giannelli, A. Quarta, S. Leporatti** P0253: Inhibition of glycolysis by using nanolipid bromopyruvic chitosan carrier is a promising tool to prevent HCC invasiveness Journal of Hepatology (2015) 62, S401.

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- 72)** **Viviana Vergaro, Paride Papadia, Stefano Leporatti, Sandra A De Pascali, Francesco P Fanizzi, Giuseppe Ciccarella** "Synthesis of biocompatible polymeric nano-capsules based on calcium carbonate: a potential cisplatin delivery system" *J. Inorganic Biochemistry*, (2015) 153, 284-292. DOI:10.1016/j.jinorgbio.2015.10.014.
- 73)** **Gianluigi Giannelli, Wolfgang Mikulits, Steven Dooley, Isabel Fabregat, Aristidis Moustakas, Peter ten Dijke, Piero Portincasa, Peter Winter, Richard Janssen Stefano Leporatti, Blanca Herrera, Aranzazu Sanchez** "The Rationale for Targeting TGF- $\beta$  in Hepatocellular Carcinoma" *European Journal of Clinical Investigation* (2016), 46, 349-361. DOI:10.1111/eci.12596.
- 74)** **Chiara Dionisi, Nemany A.N. Hanafy, Concetta Nobile, Maria Luisa de Giorgi, Ross Rinaldi, Sergio Casciaro, Yuri M. Lvov and Stefano Leporatti** " Halloysite Clay Nanotubes as Carriers for Curcumin: Characterization and Application " *IEEE Transactions On Nanotechnology* 2016,15 (5), 720-724 DOI: 10.1109/TNANO.2016.2524072.
- 75)** **Francesco Conversano, Paola Pisani, Ernesto Casciaro, Marco Di Paola, Stefano Leporatti, Roberto Franchini, Alessandra Quarta, Giuseppe Gigli, and Sergio Casciaro** "Automatic Echographic Detection of Halloysite Clay Nanotubes in a Low Concentration Range" *Nanomaterials* 2016, 6, 66; DOI:10.3390/nano6040066.
- 76)** **Nemany A. Hanafy, Marzia Maria Ferraro, Antonio Gaballo, Luciana Dini, Vittorianna Tasco, Concetta Nobile, Maria Luisa De Giorgi, Sonia Carallo, Ross Rinaldi and Stefano Leporatti** "Fabrication and Characterization of ALK1fc-Loaded Fluoro-Magnetic Nanoparticles for inhibiting TGF  $\beta$ 1 in Hepatocellular Carcinoma" *RSC Advances* 2016, 6, 48834 - 48842. DOI: 10.1039/C6RA06345D.
- 77)** **Mariafrancesca Cascione, Valeria De Matteis, Ross Rinaldi and Stefano Leporatti** "Atomic Force Microscopy combined with Optical Microscopy for Cells Investigation" Special Issue" Scanning probe microscopy in soft matter and life sciences" *Microscopy Research and Techniques*, 2016, 80 (1), 109-123 (Invited Review). DOI: 10.1002/jemt.22696.
- 78)** **Moitza Principe, Simone Borgoni, Maria Francesca Cascione, Michelle Samuel Chattaragada, Sammy Ferri Borgogno, Michela Capello, Jennifer Chapelle, Francesca Di Modugno, Paola Defilippi, Paola Nisticò, Paola Cappello, Stefano Leporatti, Francesco Novelli** "Regulation of pancreatic cancer adhesion, migration and invasion by alpha-Enolase (ENO1)" *Journal of Hematology & Oncology* 2017, 10:16, DOI: 10.1186/s13045-016-0385-8.
- 79)** **Viviana Vergaro, Elisabetta Carata, Francesca Baldassarre, Elisa Panzarini, Luciana Dini, Claudia Carlucci, Stefano Leporatti, Barbara Federica Scremin, Davide Altamura, Cinzia Giannini and Giuseppe Ciccarella** "Scalable production of calcite nanocrystals by atomization process: Synthesis, characterisation and biological interactions study" *Advanced Powder Technology* 28 (2017) pp. 2445-2455. DOI: 10.1016/j.apt.2016.12.018.
- 80)** **Stefano Leporatti** "Halloysite Clay nanotubes as Nano-Bazookas for Drug Delivery" *Polymer International, (Invited Review)* 2017, 66, (8), 1111-1118. DOI: 10.1002/pi.5347.
- 81)** **Nemany A. Hanafy, Alessandra Quarta, Riccardo Di Corato, Luciana Dini, Concetta Nobile, Vittorianna Tasco, Sonia Carallo, Mariafrancesca Cascione, Ross Rinaldi, Isabel Fabregat and Stefano Leporatti** Hybrid Polymeric-Protein Nano-Carriers (HPPNC) for Targeted Delivery of TGF $\beta$  Inhibitors to Hepatocellular Carcinoma Cells" *Journal of Materials Science: Materials in Medicine*, (2017) 28:120 DOI 10.1007/s10856-017-5930-7.

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- 82) Mariafrancesca Cascione, Valeria De Matteis, Chiara Cristina Toma, Paolo Pellegrino, Stefano Leporatti, Rosaria Rinaldi** "Morphomechanical and structural changes induced by ROCK inhibitor in breast cancer cells" Experimental Cell Research, 2017 360, pp. 303-309. DOI: <http://dx.doi.org/10.1016/j.yexcr.2017.09.020>.
- 83) Luca Salvatore, Vito Emanuele Carofiglio, Paolo Stufano, Valentina Bonfrate, Emanuela Calò, Stefania Scarlino, Paola Nitti, Domenico Centrone, Mariafrancesca Cascione, Stefano Leporatti, Alessandro Sannino, Marta Madaghiele** "Potential of electrospun poly(3-hydroxybutyrate)/collagen blends for tissue engineering applications" Journal of Healthcare Engineering, Research Article (13 pages), Article ID 6573947, Volume 2018 (2018).
- 84) Nemany A.N. Hanafy, Luciana Dini, Cinzia Citti, Giuseppe Cannazza and Stefano Leporatti** "Inhibition of Glycolysis by using Micro\Nano-Lipid Bromopyruvic Chitosan Carrier as Promising Tool to Improve Treatment of Hepatocellular Carcinoma", Nanomaterials, 2018, 8(1), 34. DOI: 10.3390/nano8010034.
- 85) Gaurav Parekh, Yuanyuan Shi, Juanjuan Zheng, Xingcai Zhang, Stefano Leporatti** "Nano-Carriers for Targeted Delivery and Biomedical Imaging Enhancement" Therapeutic Delivery (Invited Review), Vol. 9, N.64, 451-468 2018 <https://doi.org/10.4155/tde-2018-0013>.
- 86) Nemany Hanafi, Alessandra Quarta, Marzia Maria Ferraro, Luciana Dini, Concetta Nobile, Maria Luisa De Giorgi, Sonia Carallo, Cinzia Citti, Antonio Gaballo, Giuseppe Cannazza, Ross Rinaldi, Gianluigi Giannelli and Stefano Leporatti** "Polymeric Nano-micelles as Novel Cargo-Carriers for LY2157299 Cancer Cells Delivery" Int. J. Mol. Sci. 2018, 19(3), 748; doi:10.3390/ijms19030748.
- 87) Valeria De Matteis, Mariafrancesca Cascione, Chiara Cristina Toma and Stefano Leporatti** "In vitro assessment of actin network and organelles alterations induced by citrate capped silver nanoparticles (AgNPs)" J. Nanopart. Res. (2018) 20:273. <https://doi.org/10.1007/s11051-018-4383-3>.
- 88) Valeria De Matteis, Mariafrancesca Cascione, Chiara Cristina Toma and Stefano Leporatti** "Silver nanoparticles: synthetic routes, in vitro toxicity and theranostic applications for cancer disease" Nanomaterials 2018, 8, 319. doi:10.3390/nano8050319.
- 89) Mariafrancesca Cascione, Stefano Leporatti, Francesco Dituri, Gianluigi Giannelli** "Transforming growth factor- $\beta$  promotes morphomechanical effects involved in epithelial to mesenchymal transition in living hepatocellular carcinoma", Int. J. Mol. Sci., 2019, 20, 108; doi: 10.3390/ijms20010108.
- 90) Mariafrancesca Cascione, Valeria De Matteis, Chiara Cristina Toma, Stefano Leporatti** "Morphomechanical alterations induced by transforming growth factor- $\beta 1$  in epithelial breast cancer cells" Cancers, 2018, 10, 234; doi:10.3390/cancers10070234.
- 91) Nemany A.N. Hanafy, Maged Elkemary and Stefano Leporatti** "Micelles Structure Development as a Strategy to Improve Smart Cancer Therapy" Cancers 2018, 10, 238; doi:10.3390/cancers10070238.
- 92) Nemany A.N. Hanafy, Maged Elkemary and Stefano Leporatti** "Optimizing CaCO<sub>3</sub> matrix might allow to raise their potential use in biomedical application" J. Nanosci. Curr. Res. 2018, 3:2 DOI: 10.4172/2572-0813.1000124
- 93) Nemany A.N. Hanafy, Maged Elkemary and Stefano Leporatti** "Understanding TGF  $\beta 1$  signalling pathway is well strategy to use its encapsulated antagonist as nano therapeutic molecules" J. Translational Science 2018, Volume 5(4): 1-2, doi: 10.15761/JTS.1000264.

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- 94) Nemany A.N. Hanafy, Maged Elkemary and Stefano Leporatti** "Reduction diameter of  $\text{CaCO}_3$  crystals by using poly acrylic acid might improve cellular uptake of encapsulated curcumin in breast cancer cells" *J Nanomed. Res.* 2018;7(4):235–239.
- 95) Stefano Leporatti** "Halloysite clay nanotubes as nano-bazookas for drug delivery" ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, MAR 18 2018, 255, 156.
- 96) Mengxue Zhou, Xingcai Zhang, Jin Xie, Rongxiang Qi, Huiru Lu, Stefano Leporatti, Jun Chen, Yi Hu** " $\text{pH}$ -sensitive poly( $\beta$ -amino ester)s nanocarriers facilitate the inhibition of drug resistance in breast cancer cells" *Nanomaterials*, 2018, 8(11), 952; <https://doi.org/10.3390/nano8110952>.
- 97) Stefano Leporatti (Ed.)** "Nanocolloids for Nanomedicine and Drug Delivery" Pages: 272, Published: December 2018 (This book is a printed edition of the Special Issue Nanocolloids for Nanomedicine and Drug Delivery that was published in *Nanomaterials*) <https://www.mdpi.com/books/pdfview/book/1053>.
- 98) Nemany A.N. Hanafy, Stefano Leporatti and Maged Elkemary** "Mucoadhesive Hydrogel Nanoparticles as Smart Biomedical Drug Delivery System" *Appl. Sci.* 2019, 9, 825; doi:10.3390/app9050825.
- 99) ShuangZhao, FrankCaruso, LarsDahne, GeroDecher, Bruno G. DeGeest, JinchengFan, Neus Feliu, Yury Gogotsi, Paula T. Hammond, Mark C. Hersam, Ali Khademhosseini, Nicholas Kotov, Stefano Leporatti, YanLi, Fred Lisdat, Luis M. Liz-Marzañ, Sergio Moya, Paul Mulvaney, Andrey L. Rogach, Sathi Roy, Dmitry G. Shchukin, Andre G. Skirtach, Molly M. Stevens, Gleb B. Sukhorukov, Paul S. Weiss, Zhao Yue, Dingcheng Zhu, and Wolfgang J. Parak** "The Future of Layer-by-Layer Assembly: A Tribute to ACS Nano Associate Editor Helmuth" *ACS Nano* 2019, 1366, 151–169. DOI: 10.1021/acsnano.9b03326.
- 100) Fatma Sami El-banna, Magdy Elsayed Mahfouz, Stefano Leporatti, Maged El-Kemary and Nemany A. N. Hanafy** "Chitosan as a Natural Copolymer with Unique Properties for the Development of Hydrogels" *Appl. Sci.* 2019, 9, 2193; doi:10.3390/app9112193.
- 101) Valeria De Matteis, Mariafrancesca Cascione, Maria Luisa De Giorgi, Stefano Leporatti and Rosaria Rinaldi** "Encapsulation of Thermo-Sensitive Lauric Acid in Silica Shell: A Green Derivate for Chemo-Thermal Therapy in Breast Cancer Cell" *Molecules* 2019, 24, 2034; doi:10.3390/molecules24112034.
- 102) Jagoba Iturri, Andreas Weber, Alberto Moreno-Cencerrado, Maria dM Vivanco, Rafael Benítez, Stefano Leporatti, and José Luis Toca-Herrera** "Resveratrol-Induced Temporal Variation in the Mechanical Properties of MCF-7 Breast Cancer Cells Investigated by Atomic Force Microscopy" *Int. J. Mol. Sci.* 2019, 20, 3275; doi:10.3390/ijms20133275.
- 103) Mariafrancesca Cascione, Valeria De Matteis , Giacomo Mandriota, Stefano Leporatti and Rosaria Rinaldi** "Acute Cytotoxic Effects on Morphology and Mechanical Behavior in MCF-7 Induced by TiO<sub>2</sub>NPs Exposure" *Int. J. Mol. Sci.* 2019, 20, 3594; doi:10.3390/ijms20143594.
- 104) Serena Mancarella, Silke Krol, Alberto Crovace, Stefano Leporatti, Francesco Dituri, Martina Frusciante and Gianluigi Giannelli** "Validation of Hepatocellular Carcinoma Experimental Models for TGF- $\beta$  Promoting Tumor Progression" *Cancers*, 2019, 11, 1510; doi:10.3390/cancers11101510.
- 105) Abdel-Majeed Safer, Stefano Leporatti, Jacquilion Jose, Mahmoud S. Soliman** "Conjugation of EGCG and Chitosan NPs as a novel Nano-Drug Delivery System"

International Journal of Nanomedicine 2019;14:8033–8046. (Awarded by University Of Kuwait)

- 106) Stefano Leporatti (Editor)** "Polymer Clay Nano-Composites" Pages: 246, Published: October 2019 (This book is a printed edition of the Special Issue "Polymer Clay Nano-Composites" that was published in Polymers) <https://www.mdpi.com/books/pdfview/book/1762>.
- 107) Nemory A. N. Hanafy, Isabel Fabregat, Stefano Leporatti, and Maged El Kemary** "Encapsulating TGF- $\beta$ 1 Inhibitory Peptides P17 and P144 as a Promising Strategy to Facilitate Their Dissolution and to Improve Their Functionalization" Pharmaceutics 2020, 12(5), 421; <https://doi.org/10.3390/pharmaceutics12050421>.
- 108) Francesca Persano and Stefano Leporatti** "Current Overview of inorganic nanoparticles for the treatment of central nervous system (CNS) diseases" Current Nanomaterials 2020, 5(2): 92 - 110, DOI:10.2174/2468187310999200430093239.
- 109) Alessandro Parodi, Magdalena Rudzińska, Stefano Leporatti, Yuri Anissimov and Andrey Zamyatnin** "Smart nanotheranostics responsive to pathological stimuli" Front. Bioeng. Biotechnol. - Nanobiotechnology, 25 May 2020 <https://doi.org/10.3389/fbioe.2020.00503>.
- 110) Nemory A. N. Hanafy, Stefano Leporatti and Maged El Kemary** "Mucoadhesive curcumin crosslinked carboxy methyl cellulose might increase inhibitory efficiency for liver cancer treatment" Materials Science and Engineering: C, Volume 116, November 2020, 111119, <https://doi.org/10.1016/j.msec.2020.111119>.
- 111) Stefano Leporatti and Jose Luis Toca-Herrera** "Biomechanics of Cell Membrane" Int. J. Mol. Sci. 2020, 21(15), 5413; <https://doi.org/10.3390/ijms21155413>.
- 112) Stefano Leporatti, Mariafrancesca Cascione, Valeria De Matteis, Rosaria Rinaldi** "Design of Nano-Clays for Drug Delivery and Bio-Imaging: Can Toxicity be an Issue?" Nanomedicine-Future Medicine 15, 25, 2020 (Published Online: 3 Sep 2020). <https://doi.org/10.2217/nnm-2020-0283>.
- 113) Mariafrancesca Cascione , Valeria De Matteis, Stefano Leporatti and Rosaria Rinaldi** "The new frontiers in neurodegenerative diseases treatment: liposome-based strategies" Published on 26 October 2020 Front. Bioeng. Biotechnol. doi: 10.3389/fbioe.2020.566767.
- 114) Stefano Leporatti, Andrea Ragusa, and Rawil Fakhrullin** "Functionalized Nanocarriers for Theranostics" Front. Bioeng. Biotechnol., 10 November 2020. doi: 10.3389/fbioe.2020.616574.
- 115) Marwa Labib Essa , Maged Abdeltawab El-Kemary, Eman Mohammed Ebrahem Saied, Stefano Leporatti and Nemory Abdelhamid Nemory Hanafy** "Nano targeted Therapies Made of Lipids and Polymers have Promising Strategy for the Treatment of Lung Cancer" Materials 2020, 13, 5397; doi:10.3390/ma13235397.
- 116) Leporatti, S., Ragusa, A., Fakhrullin, R., eds. (2021).** Functionalized Nanocarriers for Theranostics. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-88966-318-7. (e-book).
- 117) F Persano, S Batasheva, GI Fakhrullina, G Gigli, S Leporatti, RF Fakhrullin** "Recent Advances in the Design of Inorganic and Nano-Clays Particles for the Treatment of Brain Disorders "Journal of Materials Chemistry B (2021), 9(12) 2726. <https://doi.org/10.1039/D0TB02957B>. (Awarded by Frontispiece of 01/04/2021 Issue)

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- 118) F Persano, G Gigli and S Leporatti** "Lipid-polymer hybrid nanoparticles in cancer therapy: current overview and future directions" Nano Express 2 (2021) 012006. DOI: 10.1088/2632-959X/abeb4b.
- 119) Nemory A. Hanafy, Stefano Leporatti and Maged El Kemary** "Extraction of Chlorophyll and carotenoids Loaded into Chitosan as Potential Targeted Therapy and Bio imaging Agents for Breast Carcinoma" International Journal of Biological Macromolecules Volume 182, 1 July 2021, Pages 1150-1160 <https://doi.org/10.1016/j.ijbiomac.2021.03.189>.
- 120) Francesca Persano, Giuseppe Gigli and Stefano Leporatti** "HALLOYSITE-BASED NANOSYSTEMS FOR BIOMEDICAL APPLICATIONS" Clays and Clay Minerals, 69, 501-521 (2021), Online First <http://link.springer.com/article/10.1007/s42860-021-00135-8>
- 121) Abdel-Majeed Safer and Stefano Leporatti** "Chitosan Nanoparticles for Antiviral Drug Delivery: A Novel Route for COVID-19 Treatment" International Journal of Nanomedicine 2021; 16: 8141-8158. <https://doi.org/10.2147/IJN.S332385>.
- 122) Francesca Persano, Stefano Persano, Maria L. Guevara, Giuseppe Gigli and Stefano Leporatti** "The mRNA technology in cancer immunotherapy" Current Nanomaterials, 2022, 7, (3), Pagg.163-165 DOI: 10.2174/240546150766220131110055.
- 123) Francesca Persano, Giuseppe Gigli and Stefano Leporatti** "Natural Compounds as Promising Adjuvant Agents in The Treatment of Gliomas" Int. J. Mol. Sci. 2022, 23(6), 3360; <https://doi.org/10.3390/ijms23063360>.
- 124) Mariafrancesca Cascione, Valeria De Matteis, Francesca Persano and Stefano Leporatti** "AFM Characterization of Halloysite Clay Nanocomposites' Superficial Properties: Current State-of-the-Art and Perspectives" Materials 2022, 15, 3441. <https://doi.org/10.3390/ma15103441>.
- 125) F Persano, C Nobile, C Piccirillo, G Gigli, S Leporatti** "Monodisperse and Nanometric-Sized Calcium Carbonate Particles Synthesis Optimization" Nanomaterials 2022, 12 (9), 1494. <https://doi.org/10.3390/nano12091494>.
- 126) Valeria De Matteis; Mariafrancesca Cascione; Stefano Leporatti** Impact of Nanomaterials in Biological Systems and Applications in Nanomedicine Field" Nanomaterials 2022, 12(10), 1775; <https://doi.org/10.3390/nano12101775>.
- 127) Abou El-Naga, H.M.H.; El-Hashash, S.A.; Yasen, E.M.; Leporatti, S.; Hanafy, N.A.N.** "Starch-Based Hydrogel Nanoparticles Loaded with Polyphenolic Compounds of *Moringa Oleifera* Leaf Extract Have Hepatoprotective Activity in Bisphenol A-Induced Animal Models". Polymers 2022, 14, 2846. <https://doi.org/10.3390/polym14142846>.
- 128) Elisa Panzarini, Stefano Leporatti, Bernardetta Anna Tenuzzo, Alessandra Quarta, Nemory A. N. Hanafy, Gianluigi Giannelli, Camilla Moliterni, Diana Vardanyan, Carolina Sbarigia, Stefano Tacconi, Marco Fidaleo, Luciana Dini** "Polymeric nanomicelles formulation of LY2157299-Galunisertib improves therapeutic outcome by greater reducing fibrosis and ameliorating fatty degeneration in a CCL4-induced hepatic- fibrosis rat-model" July 2022, Journal of Hepatology 77:S763-S764.
- 129) Stefano Leporatti** "Thinking about Enhanced Permeability and Retention Effect (EPR)" J. Pers. Med. 2022, 12, 1259. <https://doi.org/10.3390/jpm12081259>.
- 130) Palamà, I.E.; Leporatti, S.** "Nanomedicine in Cancer Targeting and Therapy." J. Pers. Med. 2022, 12, 1312. <https://doi.org/10.3390/jpm12081312>.
- 131) Bohara RA, Tabassum N, Singh MP, Gigli G, Ragusa A, Leporatti S.**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

“Recent Overview of Resveratrol’s Beneficial Effects and Its Nano-Delivery Systems” Molecules. 2022; 27(16):5154. <https://doi.org/10.3390/molecules27165154>.

- 132) **Bohara, Raghvendra A., and Stefano Leporatti.** 2022. "Translational Hurdles with Magnetic Nanoparticles and Current Clinical Scenario in Hyperthermia Applications" Magnetochemistry 8, no. 10: 123. <https://doi.org/10.3390/magnetochemistry8100123>.
- 133) **Persano, Francesca, and Stefano Leporatti.** 2022. "Nano-Clays for Cancer Therapy: State-of-the Art and Future Perspectives" Journal of Personalized Medicine 12, no. 10: 1736. <https://doi.org/10.3390/jpm12101736>.
- 134) **Elisa Panzarini, Stefano Leporatti et al.** “Therapeutic Effect of Polymeric Nanomicelles Formulation of LY2157299-Galunisertib on CCl<sub>4</sub>-Induced Liver Fibrosis in Rats”. J. Pers. Med. 2022, 12(11), 1812; <https://doi.org/10.3390/jpm12111812>
- 135) **Stefano Tacconi, Simone Augello, Francesca Persano, Carolina Sbarigia Elisabetta Carata, Stefano Leporatti, Marco Fidaleo, Luciana Dini** “Amino-functionalized mesoporous silica nanoparticles (NH<sub>2</sub>-MSiNPs) impair the embryonic development of the sea urchin *Paracentrotus lividus*” Environmental Toxicology and Pharmacology 95 (2022) 103956. <https://doi.org/10.1016/j.etap.2022.103956>.
- 136) **Nemany A. N. Hanafy, Eman Ali Bakr Eltonouby, Elsayed .I Salim, Magdy .E Mahfouz , Stefano Leporatti** “Simultaneous Administration of Bevacizumab with Bee-PollenExtract-Loaded Hybrid Protein Hydrogel NPs Is a Promising Targeted Strategy against Cancer Cells” Int. J. Mol. Sci. 2023, 24, 3548. <https://doi.org/10.3390/ims24043548>
- 137) **Loretta L. del Mercato, Stefano Leporatti, Marzia. M. Ferraro, Nemany A. Hanafy, Rosaria Rinaldi, Wolfgang.J.Parak and Susana Carregal-Romero** Multilayer Polyelectrolyte Capsules for Sensing and Drug Delivery: Fundamentals and Applications. *Bio-Nano Interfaces* Chapter 57. Pag. 1385-1429. Ed. Wolfgang J. Parak, Jenny Stanford Publishing, [www.jennystanford.com](http://www.jennystanford.com), in Press 2024.
- 138) **Jitendra Patel, G. Shiva Kumar, Harekrishna Roy, Balaji Maddiboyina, Stefano Leporatti and Raghvendra A. Bohara** “From nature to nanomedicine: bioengineered metallic nanoparticles bridge the gap for medical applications” Discover Nano 19, 85 (2024). <https://doi.org/10.1186/s11671-024-04021-9>.
- 139) **Martano, S., Faktor, J., Kote, S., Cascione, M., Di Corato, R., Faktorova, D., Semeraro, P., Rizzello, L., Leporatti, S., Rinaldi, R., & De Matteis, V.** (2025). DIA/SWATH-Mass Spectrometry Revealing Melanoma Cell Proteome Transformations with Silver Nanoparticles: An Innovative Comparative Study. International Journal of Molecular Sciences, 26(5), 2029. <https://doi.org/10.3390/ijms26052029>
- 140) **Persano F, Parodi A, Pallaeva T, Kolesova E, Zamyatnin AA Jr, Pokrovsky VS, De Matteis V, Leporatti S, Cascione M.** Atomic Force Microscopy: A Versatile Tool in Cancer Research. Cancers. 2025; 17(5):858. <https://doi.org/10.3390/cancers17050858>.

### Experimental Reports

**1) C. DeWolf, S. Leporatti, R. Klinger, K. Kjaer, G. Brezesinski**

"Phase separation in phosphatidylinositol/phosphatidylcoline mixed monolayers" Annual report HASYLAB DESY (1998) 32-33.

**2) E. Donath, S. Leporatti, I. Estrela-Lopis, A. Brandt**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

“SANS study of Polyelectrolytes multilayers on colloidal templates” BENSC Experimental Reports (2000).

**3) E. Donath, I. Estrela-Lopis, S. Leporatti, P. Strunz, A. Hoel**

“SANS Study of the Polyelectrolytes layers structure for hollow capsules” BENSC Experimental Reports, 134 (2001).

### **Contributions to National and International Conferences**

**I. G. Caminati, D. Berti, G. Gabrielli, S. Leporatti, R. Rolandi, M. G. Ponzi – Bossi, B. Yang**

“Structural characterization of Langmuir-Blodgett films of nickel complexes with amphiphilic compounds ”

Proceedings of the 7th International Conference on Organized Molecular Films

**Numana (Ancona) Italy 10-15 September 1995. (Poster Communication)**

**2. A. Diaspro, F. Beltrame, M. Fato, P. Ramoino, A. Palmeri, S. Leporatti, R. Rolandi**

“SFM and CLSM characterization of *Heledone Chrysote* ”.

Proceedings of the 18<sup>th</sup> Annual International Conference of IEEE Engineering in Medicine and Biology, Paper Number 933 (1996).

**Amsterdam, the Netherlands 31 October - 3 November 1996. (Poster Communication)**

**3. R. Eggenhofer, A. Tuccio, R. Masini, A. Diaspro, S. Leporatti, R. Rolandi**

“Films spessi orientati di  $YBa_2Cu_3O_{7-\square}$  cresciuti mediante deposizione crioeletroforetica ”

Proceedings of LXXXII Congresso Nazionale (Congresso del Centenario) della Societa' Italiana di Fisica (SIF)

**Villa Olmo (Como) Italy 27-31 October 1997. (Poster Communication)**

**4. S. Leporatti, S. Akari, F. Bringezu, G. Brezesinski, H. Möhwald**

“Scanning Force Microscopy of Phospholipid Monolayers on solid substrates ”

Proceedings of the 9th International Conference on Scanning Tunneling Microscopy/Spectroscopy and Related Techniques STM '97

**Hamburg (Germany) 20-25 July 1997. (Poster Communication)**

**5. S. Leporatti, F. Bringezu, G. Weidemann, G. Brezesinski, H. Möhwald**

“Condensed Phases of Branched Phospholipid Monolayers ”

Proceedings of the 18th Frühjahrstagung der Deutschen Physikalischen Gesellschaft Bayreuth (Germany) 9-13 March 1998. (Oral Communication)

**6. Stefano Leporatti, Christin DeWolf, Gerald Brezesinski, Helmuth Möhwald, Reinhardt Klinger**

“Phase separation in phosphatidylinositol/phosphatidylcoline mixed monolayers ”

Proceedings del XIV Congresso della Società Italiana di Biofisica Pura ed Applicata (SIPBA) Genova (Italy) 24-26 September 1998. (Poster Communication)

**7. S. Leporatti, F. Bringezu, G. Brezesinski, H. Möhwald**

“Scanning Force Microscopy investigation of Branched Phospholipid Monolayers ”

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

Raster-Sonden-Mikroskopien an Organische Materialen VII  
**Diskussionstagung Berlin, 7.-9 October 1998. (Oral Communication)**

**8. S. Leporatti, K. Graf, H. Riegler, H. Möhwald**

"Surface Morphological changes induced by transfer in Langmuir-Blodgett phospholipid monolayers studied by Scanning Force Microscopy "

**ECOF 7 Seventh European Conference Thin Organized Films**

Potsdam, Germany , September 14-18, 1998. (Poster Communication)

**9. S. Leporatti, C. DeWolf, C. Kirsch, G. Brezesinski, H. Möhwald**

"Phase Separation in Phosphatidylinositol (PI)/Phosphatidylcoline (PC) mixed monolayers "

Ist EI.BA Nanotechnology Conference, Rome 14-16 April 1999 (Poster Communication).

**10. E. Donath, A. Voigt, G. B. Sukhorukov, S. Moya, S. Leporatti, M. H. Struszczyk, H. Möhwald** "Polyelectrolyte micro- and nanocapsules made from chitosan derivatives" Euchis '99

3<sup>rd</sup> International Conference of the European Chitin Society Potsdam, Germany, Aug. 31-Sept. 3, 1999. (Oral Communication)

**10. S. Leporatti, C. Gao, A. Voigt, S. Moya, E. Donath, H. Möhwald**

"Polyelectrolyte capsule wall changes upon annealing. A Confocal Laser Scanning Microscopy (CLSM) and Scanning Force Microscopy (SFM) study".

3<sup>rd</sup> International Discussion Meeting of the Colloid Gessellschaft e.V. "Functional Colloidal Systems-Interfaces with Function"

Postdam University (Germany), March 16-17, 2000. (Poster Communication).

**11. A. Voigt, N. Buske, G. B. Sukhorukov, A. A. Antipov, S. Leporatti, H. Lichtenfeld, H. Bäumler, E. Donath, H. Möhwald.**

"Novel Micro- and Nanocapsules as Magnetic Carriers" 3<sup>rd</sup> International Conference on the Scientific and Applications of Magnetic Carriers May 3-6, 2000. Rostock, Germany. (Oral Communication)

**12. H. Bäumler B. Neu, A. Voigt, R. Mitlöner, S. Leporatti, E. Donath, C. Gao, H. Kiesewetter, H. Möhwald, H. J. Meiselman**

"Polyelectrolyte capsules derived from biological templates as a new class of micro- and nanoconfinements"

Biophysical Society 44<sup>th</sup> Annual Meeting February 12-16, 2000, New Orleans, Louisiana (Poster Communication).

**13. S. Leporatti, C. Gao, A. Voigt, S. Moya, E. Donath, H. Möhwald**

"Polyelectrolyte capsule wall changes upon annealing. A Confocal Laser Scanning Microscopy (CLSM) and Scanning Force Microscopy (SFM) study".

10<sup>th</sup> International Conference of Colloids and Interface Science (IACIS 2000) 23-28 July 2000, Bristol (UK) (Poster Comunication).

**14. E. Donath, L. Dahne, S. Dudnik, C. Gao, R. Georgieva, S. Leporatti, H. Lichtenfeld, S.Moya, G. B. Sukhorukov, A. Voigt, H. Baumler and H. Mohwald**

"Thermodynamical, electrical, mechanical and permeability properties of ultrathin polyelectrolyte capsule walls fabricated by templating soluble colloidal cores"

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**10<sup>th</sup> International Conference of Colloids and Interface Science (IACIS 2000) 23-28 July 2000, Bristol (UK) (Oral Communication).**

**15. G. B. Sukhorukov, A. Voigt, I. L. Radtchenko, A. A. Antipov, S. Leporatti, V. Dudnik, E. Donath and H. Möhwald**

"Coating of colloidal particles by means of controlled precipitation of polymers"

**10<sup>th</sup> International Conference of Colloids and Interface Science (IACIS 2000) 23-28 July 2000, Bristol (UK) (Poster Communication).**

**16. S. Leporatti, A. Voigt, E. Donath, H. Möhwald**

"Scanning Force Microscopy Investigation of Polyelectrolyte Nano- and Microcapsules Wall Texture"  
**INFMeeting, National Conference of Physics of Matter, Genova (Italy) 12-16 Juni 2000 (Poster Communication).**

**17. Changyou Gao, Stefano Leporatti, Sergio Moya, Edwin Donath, Helmuth Möhwald** "Fabrication and properties of polyelectrolyte capsules obtained stepwise by self-assembly of poly(styrenesulfonate sodium salt) and poly(diallyldimethyl ammonium) chloride onto melamine resin particles"

**LB 9-Potsdam 2000 The Ninth International Conference on Organised Molecular Films 28.08-01.09.2000, Potsdam, Germany (Poster Communication).**

**18. A.A. Antipov, G. B. Sukhorukov, I.L. Radchenko, S. Leporatti, E. Donath, H. Möhwald** "Polyelectrolytes Multilayer Capsules Permeability Control" **LB 9-Potsdam 2000 The Ninth International Conference on Organised Molecular Films 28.08-01.09.2000, Potsdam, Germany (Poster Communication).**

**19. C. DeWolf, S. Leporatti, C. Kirsch, R. Klinger, G. Brezesinski**

"Second Messengers: How the degree of Inositide Phosphorylation affects the monolayer structure"

**LB 9-Potsdam 2000 The Ninth International Conference on Organised Molecular Films 28.08 -01.09.2000, Potsdam, Germany (Oral Communication).**

**20. E. P. Vieira, L. Dähne, S. Leporatti, M. Coelho, M. Gao, E. Donath, H. Möhwald**

"Use of fluorescent nanoparticles for preparation and permeation studies of new polyelectrolytes capsules"

**LB 9-Potsdam 2000 The Ninth International Conference on Organised Molecular Films 28.08-01.09.2000, Potsdam, Germany (Poster Communication).**

**21. Stefano Leporatti, Changyou Gao, Andreas Voigt, Edwin Donath, Helmuth Möhwald**

"Ultrathin Polyelectrolyte Multilayer Capsules Texture: a Scanning Force Microscopy (SFM) and Confocal Laser Scanning Microscopy (CLSM) Study"

**SXM 4<sup>th</sup> International Conference on the Development and Technological Application of Scanning Probe Methods, Münster 25-27 September 2000 (Poster Communication).**

**22. E. Donath, A. Voigt, G. B. Sukhorukov, S. Moya, H. Lichtenfeld, R. Georgieva, S. Leporatti, L. Dahne, H. Möhwald**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

"From Polyelectrolyte Multilayers Templatized on Latex Particles and Biological cells Toward Drug Carriers, Microreactors and Artificial Cells".

**The X National Symposium on Surface and colloid Science " Self-assembly and Self-Organizing Systems " Mauno Koivisto Centre, Turku, Finland September 4-5, 2000 (Oral Communication).**

**23. E. Donath, L. Dähne, G. B. Sukhorukov, S. Moya, A. Antipov, S. Leporatti, G. Ibarz, H. Möhwald**

"From Self-Assembled Multilayers to Drug Carriers, Nano-Reactors and Artificial Cells "

**Assembly and Self-Assembly at the Interface of Chemistry and Physics, II Ciocco, Italy, August 20-25, 2001. (Poster Communication).**

**24. A.A. Antipov, G. B. Sukhorukov, S. Leporatti, E. Donath and H. Möhwald**

"Polyelectrolyte Multilayer Capsules: Uptake and Release Controlling "

**Assembly and Self-Assembly at the Interface of Chemistry and Physics, II Ciocco, Italy, August 20-25, 2001. (Poster Communication).**

**25. I. Revenko, P. Dewolf, S. Leporatti**

,, Atomic Force Microscopy in Analysis of Biomaterials ,,

**Dreiländertagung für Elektronenmikroskopie, Innsbruck, 9-14 September 2001. (Oral Communication).**

**26. I. Estrela-Lopis, S. Leporatti, L. Dähne, E. Donath**

"SANS Studies of Hollow Polyelectrolyte Multilayer Capsules"

**II<sup>th</sup> International Conference on Surface and Colloidal Science September 15<sup>th</sup> – 19<sup>th</sup> 2003 Foz do Iguacu, Brazil (Oral Communication).**

**27. Edwin Donath, Irina Estrela-Lopis, Olga Tiourina, Stefano Leporatti, Sabine Hiller,, Polyelectrolyte Multilayer Capsules-Controlling Interaction, Layer Structure and Layer Dynamics ,,**

**II<sup>th</sup> International Conference on Surface and Colloidal Science September, 15<sup>th</sup> – 19<sup>th</sup> 2003 Foz do Iguacu, Brazil (Oral Communication).**

**28. I. Estrela-Lopis, S. Leporatti, G. Brezesinski, W. Richter, E. Donath**

,, Biomimetic Sandwiches on Colloids: Polyelectrolyte/Lipid Composite ,,

**II<sup>th</sup> International Conference on Surface and Colloidal Science September, 15-19 2003 Foz do Iguacu, Brazil (Poster Communication).**

**29. Stefano Leporatti, Sabine Hiller, Sergio E. Moya, Edwin Donath**

"Colloidal Force Microscopy as a Tool for Controlling Layer-by Layer Assembly on Colloidal Particles "

**2<sup>nd</sup> International Workshop, 18 Sept. 2003, Berlin "Scanning Probe Microscopy in Life Science" (Poster Communication).**

**30. J. L. Toca-Herrera, S. Leporatti, V. Bosio, A. Fery, M. Marek, E. Donath, U.W. Sleytr, D. Pum**

"Hollow Polymeric Capsules Covered with S-Layers as a Future Template for Receptors and Model to Investigate Polymer-Protein Interactions "

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**2<sup>nd</sup> International Workshop, 18 Sept. 2003, Berlin “Scanning Probe Microscopy in Life Science” (Poster Communication).**

**31. Ronny Sczech, Hans Riegler, Joachim Storsberg, Stefano Bruzzano, Andre' Laschewsky, Stephan Eichhorn, Stefano Leporatti, Edwin Donath**  
„Polymere Haftvermittler zur Verbesserung der Eigenschaften funktionaler Papiere“  
**Wing -Statusseminar "Grenzflächenhaftung in technischen Systemen" 29.-31 October 2003 Weimar (Poster Communication).**

**32. Stefano Leporatti, Sabine Hiller, Sergio E. Moya, Edwin Donath**  
“Colloidal Force Microscopy as a Tool for Controlling Layer-by Layer Assembly on Colloidal Particles”  
**2<sup>nd</sup> National Conference on Nanoscience and Nanotechnology: The Molecular Approach. Area del CNR, Bologna (Italy) 25-27 February 2004 (Poster Communication).**

**33. Sabine Hiller, Stefano Leporatti, Andreas Schnäckel, Elke Typlt, Edwin Donath**  
“Assembly and exchange of biomolecules in multilayers on colloidal particles-A flow cytometric investigation”  
**3<sup>rd</sup> Biotechnology symposium 2004, University of Leipzig Centre for Biotechnology and Biomedicine 19 May 2004 (Poster Communication).**

**34. Stefano Leporatti, Anja Gerth, Sergio E. Moya, Guido Köhler, Bernd Kohlstrunk, Sunna Hauschildt, Edwin Donath**  
“Colloidal Force Microscopy to Probe Supported Membrane Systems and Cells”  
**3<sup>rd</sup> International Workshop, 13 October 2004, Berlin “Scanning Probe Microscopy in Life Science” (Poster Communication).**

**35. Joachim Storsberg, Stefano Bruzzano, Andre' Laschewsky, Stephan Eichhorn, Ronny Sczech, Hans Riegler, Stefano Leporatti, Edwin Donath**  
„Polymere Haftvermittler zur Verbesserung der Eigenschaften funktionaler Papiere“  
**Wing -Statusseminar "Grenzflächenhaftung in technischen Systemen" 10th-11th November 2004 Bonn (Oral Communication).**

**36. Anja Gerth, Stefano Leporatti, Guido Köhler, Bernd Kohlstrunk, Edwin Donath, Sunna Hauschildt**  
“Effect of LPS on the mechanical Behaviour of Human Macrophages”  
**7-10 September 2005, Weimar (Germany) “2nd International Congress Sepsis and Multiorgan Dysfunction”. (Poster Communication).**

**37. Anja Gerth, Stefano Leporatti, Guido Köhler, Bernd Kohlstrunk, Edwin Donath, Sunna Hauschildt**  
“Effect of LPS on the mechanical Behaviour of Human Macrophages”  
**21-24 September 2005, Kiel (Germany) “36th Annual Meeting of the DGfI German Society of Immunology” (Poster Communication).**

**38. Stefano Leporatti, Christian Bitterlich, Guido Köhler, Martin Fischlechner, Sergio E. Moya, and Edwin Donath “Nanomechanics of Functionalised Biocomposites” 4<sup>th</sup>**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**International Workshop, 13 October 2005 , Berlin “Scanning Probe Microscopy in Life Science” (Poster Communication).**

**39. Stefano Leporatti, Sergio E. Moya, Guido Koehler, Christian Bitterlich, Martin Fischlechner, Edwin Donath, Ross Rinaldi**

**“Lipid layers for Biocomposite Colloids \_Novel Devices with Biological Functions” Nanomech-06, Materials Science and Materials Mechanics at the Nanoscale, Bari 19-23 November 2006. (Invited Oral Communication)**

**40. Stefano Leporatti, Guido Koehler, Christian Bitterlich, Sergio E. Moya, Edwin Donath, Ross Rinaldi**

**“Lipid Layers on Polyelectrolyte Multilayer Supports-Studies by Colloidal Force Spectroscopy” AFMBiomed, International Conference 2007, International Meeting on AFM in Life Sciences and Medicine, Barcelona 19-21 April 2007 (Poster Communication).**

**41. S. Leporatti, V. Arima, G. Maruccio, L.L. del Mercato, E. Primiceri, A. Antonaci, V. Frascerra, N. Sgarbi, A. Aloisi, F. Calabi, R. Cingolani, R. Rinaldi**

**“SPM characterization of self-assembled materials for nano-biotechnology applications” Veeco Italian User Meeting, University of Milan Bicocca 15-16 May 2007. (Invited Oral Communication).**

**42. Stefano Leporatti, Antonella Zacheo, Daniele Vergara, Viviana Vergaro, Giuseppe Maruccio, Yuri M. Lvov, Roberto Cingolani and Ross Rinaldi**

**“Engineering microenvironment by layer-by-layer biocomposite films for breast cancer cells controlled growth: Morphostructure and cytomechanics study”. Proceedings of 236<sup>th</sup> American Chemical Society Meeting **Polymer Materials Science and Engineering**, v. 99, (2008) in press. (Invited Oral Communication)**

**43. Vergara D., De Domenico S., Bonsegna S., Marti S., Ingrosso I., Leporatti S., Maruccio G., Vergaro V., Cingolani R., Rinaldi R., Santino A., Giovinazzo G.**

**“Effects of Trans-Resveratrol on Cytoskeleton (Re)organization of MCF-7 Breast cancer cell Line ” Società Italiana di Fisiologia Vegetale XLVII Congresso, Pisa 30<sup>th</sup> June- 2<sup>nd</sup> July 2008 (Poster Communication).**

**44. Stefano Leporatti, Antonella Zacheo, Daniele Vergara, Viviana Vergaro, Giovanna Giovinazzo, Angelo Santino, Roberto Cingolani, Ross Rinaldi**

**“Cytomechanical and topological investigation of cancer cells by Scanning Force Microscopy (SFM) ” Seeing at Nanoscale VI, July 9-11, 2008 (Poster Communication).**

**45. A. Zacheo, S. Bettini, R. Pagano, S. Bonsegna, G. Maruccio, R. Cingolani, R. Rinaldi, U. Reibetanz, E. Donath, L. Giotta, L. Valli, A. Santino, S. Leporatti**

**“Plant oil bodies as functional nanocarriers for pharmaceutical delivery” 11<sup>th</sup> European Conference on Organised Films, July 9-11 2008, Potsdam (Germany) (Oral Communication).**

**46. D. Vergara, S. Leporatti, R. Rinaldi, R. Martignago, F. De Nuccio, G. Nicolardi, M. Maffia. “Effects of IFN-beta on Astrocytes: a Proteomic and Nanotechnological Approach ” HUPO 2008, 16-20 August 2008 (Poster Comunication).**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**47. D. Vergara, S. Leporatti, G. Maruccio, V. Vergaro, S. Bonsegna, G. Giovinazzo, A. Santino, R. Cingolani, R. Rinaldi**

“*Cytomechanics of breast cancer cell investigated by Scanning Force Microscopy: elastic modulus modification induced by resveratrol*” **AFMBiomed, International Conference 2007, International Meeting on AFM in Life Sciences and Medicine, Monterrey (USA) 15<sup>th</sup> -18<sup>th</sup> October 2008 (Poster Communication).**

**48. A. Zacheo, S. Bonsegna, L. Giotta, G. Maruccio, R. Cingolani, R. Rinaldi, S. Leporatti, L. Valli, A. Santino** “*Artificial oil bodies as novel nano-device for pharmaceuticals delivery*” **X National Biotechnology Congress, Perugia (Italy) 17<sup>th</sup> -19<sup>th</sup> September 2008 (Poster Communication).**

**49. Sandra Rocha, Isabel Cardoso, Hans Börner, Maria João Saraiva, Stefano Leporatti, Maria do Carmo Pereira, Manuel Coelho** “*Polymer conjugates of beta-sheet breaker peptide: Effect on Fibrillogenesis and Toxicity of Amyloid-beta Peptide*” **Açores, XVI National Congress of Biochemistry. (Poster Communication).**

**50. Elshad Abdullayev, Stefano Leporatti, Viviana Vergaro, Benedetta Antonazzo, Pantaleo Davide Cozzoli, Roberto Cingolani, Ronald Price, Yuri M. Lvov** “*Halloysite clay tubes as biocompatible nanocontainers for sustained release of protective agents*” **Clay Conference 15th June 2009 (Oral Communication).**

**51. Stefano Leporatti, Ilaria Elena Palamà, Addolorata Maria Luce Coluccia, Carlo Gambacorti-Passerini, Antonio della Torre, Viviana Vergaro, Elisabetta Perrone, Roberto Cingolani, Ross Rinaldi** “*Multilayered Polyelectrolyte Capsules and Coated Colloids: Cytotoxicity and Uptake by Cancer Cells*”. **Cancer Conference Peking (China) 24th-29th June 2009 (Poster Communication).**

**52. Ilaria Elena Palamà, Addolorata Maria Luce Coluccia, Carlo Gambacorti-Passerini, Antonio della Torre, Viviana Vergaro, Elisabetta Perrone, Roberto Cingolani, Ross Rinaldi and Stefano Leporatti** “*Imatinib-loaded Polymer Capsules for Increased Targeting of BCR/ABL+ Leukemia Cells*”. **Cancer Conference Peking (China) 24th-29th June 2009 (Oral Communication).**

**53. Viviana Vergaro, Ilaria E. Palamà, Antonella Zacheo, Zhiguo Zheng, Elshad Abdullayev, Yuri M. Lvov, Giovanna Giovinazzo, Angelo Santino, Roberto Cingolani, Ross Rinaldi and Stefano Leporatti** “*Cytomechanical and morphological modifications of cancer cells induced by drug-carriers: a Scanning Force Microscopy (SFM) study.*” **Seeing at Nanoscale VII, August 2009, S. Barbara (USA) (accepted Poster Communication).**

**54. Viviana Vergaro, Ilaria E. Palamà, Antonella Zacheo, Zhiguo Zheng, Elshad Abdullayev, Yuri M. Lvov, Giovanna Giovinazzo, Angelo Santino, Roberto Cingolani, Ross Rinaldi and Stefano Leporatti** “*Scanning Force Microscopy (SFM) investigation of cytomechanical changes induced by drug-loaded carriers uptake by neoplastic cells*” **Seeing at Nanoscale VII, August 2009, S. Barbara (USA) (accepted Poster Communication).**

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- 55. Viviana Vergaro, Antonella Zacheo, Stefania Bonsegna, Ilaria E. Palamà, Zhiguo Zheng, Elshad Abdullayev, Giovanna Giovinazzo, Roberto Cingolani, Ross Rinaldi, Yuri M. Lvov , Angelo Santino and Stefano Leporatti** "Cytomechanical modifications induced by drug-loaded carriers uptake by breast cancer cells" **X European Biophysics Congress (EBSA) 11th-15th July 2009, Genova (Italy)** (Poster Communication).
- 56. Viviana Vergaro, Antonella Zacheo, Stefania Bonsegna, Ilaria E. Palamà, Zhiguo Zheng, Elshad Abdullayev, Giovanna Giovinazzo, Roberto Cingolani, Ross Rinaldi, Yuri M. Lvov , Angelo Santino and Stefano Leporatti** "Cytomechanical modifications induced by drug-loaded carriers uptaken by breast cancer cells" **European Biophysics Congress (EBSA) 11th-15th July 2009, Genova (Italy)** (Oral Communication).
- 57. Viviana Vergaro, Zhiguo Zheng, Elshad Abdullayev, Yuri M. Lvov, Giovanna Giovinazzo, Angelo Santino, Roberto Cingolani, Ross Rinaldi and Stefano Leporatti** "Nanotechnology for cancer therapy: cytomechanical changes induced by drug-loaded carriers uptake by neoplastic cells". **2nd National Nanomedicine Conference 21th-22th September 2009 Pavia (Italy)** (Oral Communication).
- 58. Viviana Vergaro, Elshad Abdullayev, David Mills, Giovanna Giovinazzo, Angelo Santino Roberto Cingolani, Yuri M. Lvov and Stefano Leporatti** "Halloysite Clay Nanotubes: Characterization, Biocompatibility and Use as Drug Carriers" **2nd National Nanomedicine Conference 21th-22th September 2009 Pavia (Italy)** (Poster Communication).
- 59. Viviana Vergaro, Zhiguo Zheng, Elshad Abdullayev, Yuri M. Lvov, Giovanna Giovinazzo, Angelo Santino, Roberto Cingolani, Ross Rinaldi and Stefano Leporatti** "Nanotechnology for Cancer Therapy: Cytomechanical Changes induced by Drug-loaded Carriers Uptake by Neoplastic Cells". **Max Planck Institute of Colloids and Interfaces SummerSchool, Albufeira (Portugal) October 4th-11th 2009.** (Invited Oral Communication)
- 60. V. Vergaro, E. Abdullayev, D. Mills, R. Cingolani, Y.M. Lvov and S. Leporatti** "Halloysite Clay Nanotubes: Characterization and Biocompatibility Study" **NanoSmat 2009, 19th-23th October 2009, Rome (Italy)** (Oral Communication).
- 61. V. Vergaro, Z. Zheng, R. Cingolani, Y.M. Lvov and S. Leporatti** "Drug-nanocarriers uptaken by cancer cells: cytotoxicity and cytomechanical investigation". **NanoSmat 2009, 19th-23th October 2009, Rome (Italy)** (Poster Communication).
- 62. Ilaria E. Palamà, Emanuela De Luca, Carlo Gambacorti-Passerini, Nicola Di Renzo, Michele Maffia, Ross Rinaldi, Roberto Cingolani, Stefano Leporatti and Addolorata M.L.Coluccia** "IMATINIB-LOADED POLYELECTROLYTE MICROCAPSULES FOR SUSTAINED TARGETING OF BCR-ABL+ LEUKEMIA STEM CELLS" **ICCR 2009, 22th-27th November 2009, Sesto S. Giovanni (Milan) (Italy).** (Oral Communication).

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- 63. Stefano Leporatti, Ilaria Elena Palamà, Addolorata Maria Luce Coluccia, Viviana Vergaro, Carlo Gambacorti-Passerini, Antonio della Torre, Elisabetta Perrone, Roberto Cingolani and Ross Rinaldi "Multilayered Polyelectrolyte Capsules and Coated Colloids: Drug Nano-Delivery to Leukemia Cells". ICCR 2009, 22th-27th November 2009, Sesto S. Giovanni (Milan) (Italy). (Poster Communication).**
- 64. Viviana Vergaro, Zhiguo Zheng, Xingcai Zhang, Yuri M. Lvov, Giovanna Giovinazzo, Angelo Santino, Roberto Cingolani, Ross Rinaldi and Stefano Leporatti "Nanocarriers for Cancer Therapy" Particles 2010 Lake Buena Vista, Orlando, FL (USA) May 22-25, 2010. (Contributed Talk).**
- 65. D.Vergara, R. Martignago, S. Leporatti, S. Bonsegna, F. De Nuccio, A. Santino, R. Cingolani, G. Nicolardi, R. Rinaldi, M. Maffia "IFN-beta therapy in multiple sclerosis: biological and nano-mechanical response in peripheral blood mononuclear cells and astrocytes" ItPA (Italian Proteomics Association) 5th ANNUAL NATIONAL CONFERENCE June 9 – 12, 2010 FIRENZE (Italy) (Poster Communication).**
- 66. Simona Bettini, Stefania Bonsegna, Rosanna Pagano, Antonella Zacheo, Viviana Vergaro, Giovanna Giovinazzo, Gabriella Caminati, Stefano Leporatti, Ludovico Valli, Angelo Santino "Plant oil bodies as novel carriers to deliver lipophilic molecules" XXXIX Congresso Nazionale di Chimica Fisica, Stresa (Italy) 20 – 24 September 2010 (Poster Communication).**
- 67. E. Fransvea, A. Mazzocca, F. Baldassarre, S. Leporatti, S. Antonaci and G. Giannelli "TGF-beta1 as a new therapeutic target for HCC." 4th European Club of Liver Cell Biology (ECLCB), Meeting Castillo de Javier, de Navarra, Pamplona (Spain) 2010. (Contributed Talk).**
- 68. Viviana Vergaro, Zhiguo Zheng, Elshad Abdullayev, Yuri M. Lvov and Stefano Leporatti "Nanotechnology for Cancer Therapy: NanoCarriers and BioMechanics" Seeing at the Nanoscale VIII Basel (Switzerland) August 30<sup>th</sup>-September 1<sup>st</sup> 2010 ([www.veeco.com/support/nanoconference/](http://www.veeco.com/support/nanoconference/)) (contributed talk)**
- 69. V. Vergaro, Z. Zheng, X. Zhang, D. Vergara, C. Bellomo, F. Baldassarre, F. Scarlino, G. Giannelli, M. Maffia, Y. M. Lvov, and S. Leporatti "Nanocarriers for Cancer Therapy" 10th INTERNATIONAL CONFERENCE ON NANOSTRUCTURED MATERIALS September 13–17 2010, La Sapienza University, Roma ITALY (<http://nano2010.mlib.cnr.it>). (Contributed Talk)**
- 70. Viviana Vergaro, Zhiguo Zheng, Xingcai Zhang, Ross Rinaldi, Yuri M. Lvov and Stefano Leporatti "Halloysite Nanotubes and Nanocolloids as Novel Drug Nanocarriers" NanotechItaly Venice, 20/22 October 2010 ([www.nanotechitaly.it](http://www.nanotechitaly.it)) (Poster Communication).**
- 71. V. Vergaro, Z. Zheng, X. Zhang, D. Vergara, C. Bellomo, F. Baldassarre, F. Scarlino, M. Bukowski, G. Giannelli, M. Maffia, Y. M. Lvov, and S. Leporatti "Nanocarriers for Cancer Therapy-Uptake Visualization" Nanosmat 5, Reims (France) 19-21 October 2010.**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

(<http://nanotechnews.wordpress.com/2009/12/17/nanosmat-5-5th-international-conference-on-surfaces-coatings-and-nanostructured-materials/>) (Poster Communication).

- 72.** **Viviana Vergaro, Flavia Scarlino, Claudia Bellomo, Ross Rinaldi, Xingcai Zhang, Elshad Abdullayev, Yuri M. Lvov, Francesca Baldassarre, Gianluigi Giannelli, Daniele Vergara, Michele Maffia and Stefano Leporatti** "Nanotechnology for Cancer Therapy: NanoCarriers and BioMechanics" Matraia (Lucca) KICK-OFF MEETING Istituto Nanoscienze del CNR 6-7 OTTOBRE 2010 (Poster Communication)
- 73.** **Viviana Vergaro, Zhiguo Zheng, Xingcai Zhang, Yuri M. Lvov and Stefano Leporatti** "Nanocarriers for Cancer Therapy" 23° Convegno Annuale dell'Associazione Italiana Colture Cellulari (AICC) Nanotecnologie e Veicolazione di Farmaci and International satellite Symposium AICC-GISM "Pivotal Aspect in Mesenchimal Stem Cells Expansion, Istituto Nazionale Tumori, Milano November 24<sup>th</sup>-26<sup>th</sup> 2010 (<http://www.onlus-aicc.org/frameset.htm>) (Poster Communication).
- 74.** **Viviana Vergaro, Zhiguo Zheng, Xingcai Zhang, Yuri M. Lvov and Stefano Leporatti** "NanoCarriers for Cancer Therapy" 23° Convegno Annuale dell'Associazione Italiana Colture Cellulari (AICC) Nanotecnologie e Veicolazione di Farmaci and International Satellite Symposium AICC-GISM "Pivotal Aspect in Mesenchimal Stem Cells Expansion, Istituto Nazionale Tumori, Milano November 24<sup>th</sup>-26<sup>th</sup> 2010 (<http://www.onlus-aicc.org/frameset.htm>) (Contributed Talk).
- 75.** **Giovanna Lucarelli, Viviana Vergaro, Flavia Scarlino, Ross Rinaldi, Giuseppe Ciccarella, Giuseppe Vasapollo, Roberta Del Sole and Stefano Leporatti** "Nanotecnologie antitumorali: con Bacco e Feymann in viaggio verso una nuova vita senza il Cancro" Festival dell'Innovazione Bari (<http://www.festivalinnovazione.puglia.it/>) (Poster Communication).
- 76.** **Viviana Vergaro, Zhiguo Zheng, Xingcai Zhang, Yuri M. Lvov and Stefano Leporatti** "Nano-trasportatori intelligenti di farmaci antitumorali: nanotubi e nanocolloidi" Festival dell'Innovazione Bari (<http://www.festivalinnovazione.puglia.it/>) (Poster Communication).
- 77.** **Viviana Vergaro, Elshad Abdullayev, Yuri M. Lvov and Stefano Leporatti** "Halloysite Nanotubes: Novel Carriers for Cancer Therapy" 241<sup>st</sup> ACS National Meeting, Anaheim, CA (USA) March 27-31, 2011; Clay/polymer composites: from nanoplates to nanotubes. Symposium. (<http://pmse.sites.acs.org/meetings.htm>) (Poster Communication).
- 78.** **Vergaro V, Lvov YM, LEPORATTI S. (2012).** "Nanocarriers for Cancer Drug Delivery. In: Max Planck Institute of Colloids and Interfaces, Summer School, Porto Cesareo, Lecce (Contributed Talk).

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- 79. Cascione MF, Vergaro V, Denora N, Franco M, LEPORATTI S. (2012). CAT microscopy: a novel tool for 3D cell investigation". In: Max Planck Institute of Colloids and Interfaces, Summer School, Porto Cesareo, Lecce (Contributed Talk)**
- 80. Vergaro V, Lvov YM, LEPORATTI S. (2012). "NANOTECHNOLOGY FOR CANCER THERAPY: WHERE WE ARE AND WHERE WE ARE GOING" In: Book of Abstracts, Workshop of Nanomedicine and Nanobiosystems, Lecce 6-8 September 2012 (Contributed Talk).**
- 81. Denora N, Laquintana V, Lopalco A, Lopedota A, Cutrugnelli A, Mandracchia D, Iacobellis G, Fino V, Vergaro V, Cascione M, LEPORATTI S., Franco M, Latrofa A (2012) "TARGETING THE MITOCHONDRIAL PROTEIN (TSPO) THROUGH G(4)-PAMAM DENDRIMERS. In: Book of Abstracts, XXII Simposio Adrifelf, Congresso Nazionale Biomateriali, Firenze 13-16 Settembre 2012 (Poster Communication).**
- 82. Viviana Vergaro, Yuri M Lvov and Stefano Leporatti "Halloysite Clay Nanotubes for Cancer Drug Delivery" In: Book of Abstracts, Nanotechitaly 2012, 21-23 November Venice (Italy) 2012 (Poster Communication).**
- 83. Viviana Vergaro, Yuri M Lvov and Stefano Leporatti "Halloysite Clay Nanotubes for resveratrol delivery to tumoral cells" ACS meeting New Orleans, Louisiana, April 7-11, 2013. (Oral Communication).**
- 84. Giulia Soloperto, Francesco Conversano, Antonio Greco, Ernesto Casciaro, Andrea Ragusa, Aime' Lay-Ekuakille, Stefano Leporatti, Sergio Casciaro "Assessment of the Enhancement Potential of Halloysite Nanotubes for Echographic Imaging" IEEE International Symposium on MeMea (Medical Measurements and Applications) Mai 4-5 2013, Gatineau, Quebec Canada, MeMea 2013 (Oral Communication)**
- 85. M. F. Cascione, V. Vergaro, N. Denora, M. Franco, R. Rinaldi, and S. Leporatti "CAT microscopy: a novel tool for 3D cell investigation" In: Book of Abstracts, 2<sup>nd</sup> Nano Institute Workshop 10-11 June 2013 (Poster Communication)**
- 86. Viviana Vergaro, Yuri M. Lvov and Stefano Leporatti "Nanotechnology for Cancer Therapy" In: Book of Abstracts, 2nd Nano Institute Workshop Modena 10-11 June 2013 (Poster Communication)**
- 87. S. Leporatti, L. L. del Mercato, F. Baldassarre, M. Ferraro, V. Vergaro, and R. Rinaldi "Theranostic Polyelectrolyte Capsules for in vitro delivery and sensing" In: Book of Abstracts, 2nd Nano Institute Workshop Modena 10-11 June 2013 (Oral Communication)**
- 88. Serena Mancarella, Valentina Greco, Francesca Baldassarre and Stefano Leporatti "Nanoengineered Capsules and particles for Tumoral targeting of Polyphenols" Meeting Prin 2010-2011 NANO Molecular tEchnologies for Drug delivery NANOMED, Torino 17<sup>th</sup> -18<sup>th</sup> febbraio 2014 (Oral Communication)**
- 89. Nemany A. Hanafy, Concetta Nobile, Maria Luisa De Giorgi and Stefano Leporatti "Novel multidrug model carrier for cancer cells treatment" "IT- Liver Meeting" and International Workshop" 3Dimensional Cell Cultures and Drug Discovery" Vienna (Austria), 27<sup>th</sup> -28<sup>th</sup> February 2014 (Poster Communication)**
- 90. Mf Cascione, D. Vergara, D. Latorre, M. Maffia, G. Maruccio, R. Rinaldi, S. Leporatti "Impact of E-caderin treatments on cancer cells – a CAT study" BioNanoMed**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**2014, 5<sup>th</sup> International Congress Nanotechnology, Medicine & Biology 26<sup>th</sup> - 28<sup>th</sup> March, Krems 2014 (Oral Communication)**

- 91.** Nemany A. Hanafy, Concetta Nobile, Maria Luisa De Giorgi and Stefano Leporatti “Encapsulation of Curcumin inside Carriers Doped with Poly(acrylic acid)” BioNanoMed 2014, 5<sup>th</sup> International Congress Nanotechnology, Medicine & Biology 26<sup>th</sup>- 28<sup>th</sup> March, Krems 2014 (Poster Communication)
- 92.** Nemany A. Hanafy, Concetta Nobile, Maria Luisa De Giorgi and Stefano Leporatti “Control of Colloidal CaCO<sub>3</sub> suspension during template fabrication by using biodegradable polymers” 2nd International Basic and Applied Sciences (ABAS) AIN-Sokhna Egypt, 2<sup>nd</sup> -4<sup>th</sup> April 2014 (Oral Communication)
- 93.** Nemany A. Hanafy, Concetta Nobile, Maria Luisa De Giorgi, Bhavna Rani, Yuan Cao, Gianluigi Giannelli and Stefano Leporatti “LY2157299-Loaded Carriers Inhibiting Wound Healing in Hepatocellular Carcinoma” European Biotechnology Congress 2014, Lecce 15<sup>th</sup> -18<sup>th</sup> May 2014 (Oral Communication, Awarded as Third EBTN Best Oral Presentation)
- 94.** Daniele Vergara, Marzia Ferraro, Anna Ferretta, MariaFrancesca Cascione, Loretta L. Del Mercato, Ross Rinaldi, Michele Maffia, Stefano Leporatti Angelo Santino, Tiziana Cocco, and Antonio Gaballo “Cytoskeletal alterations of parkin-mutant human primary fibroblasts” European Biotechnology Congress 2014, Lecce 15<sup>th</sup> -18<sup>th</sup> May 2014 (Poster Communication)
- 95.** Mf Cascione and S. Leporatti “CAT (Confocal-AFM-TIRF) Microscopy 3D Investigation of Cells and Targeted Drug delivery” Fotonica 2014, Napoli 12<sup>th</sup> -14<sup>th</sup> June 2014 (Invited Oral Communication).
- 96.** Nemany A. Hanafy, Concetta Nobile, Maria Luisa De Giorgi, and Stefano Leporatti “Curcumin bio\nano-template for building layer by layer capsules” Nanomedicine Viterbo 2014, 17<sup>th</sup> -19<sup>th</sup> September 2014 (Oral Communication).
- 97.** Nomany A. Hanafy, Concetta Nobile, Maria Luisa De Giorgi, and Stefano Leporatti “Polymeric Nanocarriers: from Production to Medical application” European Biotechnology Days, Cluj-Napoca/ Romania, 9 - 11 October, 2014 (Oral Communication).
- 98.** Serena Mancarella, Valentina Greco, Francesca Baldassarre, Daniele Vergara, Michele Maffia and Stefano Leporatti “Polymer-Coated Magnetic Nanoparticles for Curcumin Delivery to Cancer Cells” NanotechItaly 2014, Venice 26<sup>th</sup>-28<sup>th</sup> November 2014 (Poster Communication)
- 99.** Nemany A. Hanafy, Concetta Nobile, Maria Luisa De Giorgi, Ross Rinaldi, and Stefano Leporatti “Novel CaCO<sub>3</sub> rods as templates for producing chitosan-polygalacturonic acid micro/nanotubes and to encapsulate bromopyurvic acid” NanotechItaly 2014, Venice 26th-28th November 2014 (Poster Communication)
- 100.** Mariafrancesca Cascione, Daniele Vergara, Giuseppe Maruccio, Pasquale Simeone, Michele Maffia, Ross Rinaldi, and Stefano Leporatti “CAT (Confocal-AFM-TIRF) Microscopy as Novel Tool for E-Cadherin Knockdown Analysis in Cancer Cells” AFM BioMed Conference San Diego, December (13)14-17, 2014 (Oral Communication)
- 101.** Mariafrancesca Cascione, Daniele Vergara, Marzia M. Ferraro, Loretta L. del Mercato, Tiziana Cocco, Ross Rinaldi, Antonio Gaballo and Stefano Leporatti “Parkin affects the biomechanical properties of human fibroblasts: a CAT

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**microscopy study” AFM BioMed Conference San Diego, December (13)14-17, 2014 (Oral Communication)**

102. **Mariafrancesca Cascione, Ross Rinaldi and Stefano Leporatti** “CAT (Confocal-AFM-TIRF) Microscopy: 3D Investigation of Cells and Targeted Drug delivery” **Bruker 1<sup>st</sup> AFM Bruker User Meeting Milan (Italy), 24<sup>th</sup> -25<sup>th</sup> February 2015 (Oral Communication)**
103. **Chiara Dionisi, Nemany A.N. Hanafy, Concetta Nobile, Marialuisa De Giorgi, Ross Rinaldi and Stefano Leporatti** “HALLOYSITE CLAY NANOTUBES FOR DELIVERY OF CURCUMIN” **Meeting PRIN NanoMed, Bologna (Italy), 23<sup>th</sup> -24 April 2015 (Oral Communication)**
104. **CHIARA DIONISI, NEMANY HANAFI, CONCETTA NOBILE, MARIALUISA DE GIORGI, ROSS RINALDI and STEFANO LEPORATTI** “HALLOYSITE CLAY NANOTUBES AS CARRIERS FOR DELIVERY OF CURCUMIN “ **AMAM 2015 Castellaneta Marina (TA), (Italy), 7<sup>th</sup> -12<sup>th</sup> June 2015. (Oral Communication)**
105. **Chiara Dionisi, Nemany A.N. Hanafy, Viviana Vergaro, Yuri M. Lvov and Stefano Leporatti** “Halloysite Clay Nanotubes as Novel Carriers for Drug Delivery” **Euroclay 2015, Edinburgh 6<sup>th</sup> -10<sup>th</sup> July 2015 (Keynote Talk)**
106. **Chiara Dionisi, Nemany A.N. Hanafy, Concetta Nobile, Maria Luisa de Giorgi, Ross Rinaldi, Sergio Casciaro, Yuri M. Lvov and Stefano Leporatti** “Halloysite Clay Nanotubes as Carriers for Curcumin Delivery” **Nanofim 2015, Lecce (Italy) 24<sup>th</sup> -25<sup>th</sup> July 2015 (Oral Communication).**
107. **L. Blasi, S. Leporatti, I.E.Palamà, A. Quarta** "Micro and Nanosystems for Biomolecular Delivery" **Workshop Materials and Technologies for HEALTHCARE and BIODIAGNOSTICS at CNR-NANOTEC (Oral Communication).**
108. **Stefano Leporatti** "Nanocarriers for Nanomedicine Drug Delivery" **Nanoscience and Nanotechnology 2015 Laboratori Nazionali of INFN, Frascati 28<sup>th</sup> September- 2<sup>nd</sup> October 2015, Frascati (Rome) (Invited Talk).**
109. **Mariafrancesca Cascione, Ross Rinaldi and Stefano Leporatti** "CAT (Confocal-AFM-TIRF) Microscopy: a Novel Tool for 3D Investigation of Cells" **Italian Conference on Condensed Matter Physics (FISMAT 2015) Palermo September 28-October 2, 2015. (Oral Communication).**
110. **Mf. Cascione S. Leporatti and R. Rinaldi** "Role of E-Cadherin in Cancer Cells progression: CAT (Confocal-AFM-TIRF) Microscopy analysis" **School of Nanomedicine Bari 2<sup>nd</sup> -4<sup>th</sup> December 2015 (Poster Communication).**
111. **Nemany A.Hanafy, Marzia Maria Ferraro, Antonio Gaballo, Luciana Dini, Vittorianna Tasco, Concetta Nobilel Maria Luisa De Giorgi, Sonia Carallo, Ross Rinaldi and Stefano Leporatti** "Fabrication and Characterization of ALK1fc-Loaded Fluoro-Magnetic Nanoparticles Rods for Inhibiting TGF  $\beta$ 1 in HCC." **School of Nanomedicine Bari 2<sup>nd</sup> -4<sup>th</sup> December 2015 (Poster Communication).**
112. **Chiara Dionisi, Nemany Hanafy, Viviana Vergaro, Yuri M. Lvov, Stefano Leporatti** "Halloysite Clay Nanotubes as Novel Carriers for Polyphenols Delivering" **ACS meeting 13<sup>th</sup> -17<sup>th</sup> March 2016, S. Diego (USA) (Oral Communication).**
113. **Nemany A. N. Hanafy, Alessandra Quarta, Riccardo Di Corato, Luciana Dini, Concetta Nobile, Maria Luisa De Giorgi, Vittorianna Tasco, Sonia Carallo, Mariafrancesca Cascione, Rosaria Rinaldi, Isabel Fabregat and Stefano Leporatti** "ENCAPSULATION OF SHT-DNA, SIRNA AND POLYPEPTIDE -17 INSIDE HYBRID POLYMERIC NANO-PROTEIN FOLIC ACID (HPNP-FA) CARRIER AS TARGETED TGF

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**INHIBITOR FOR HEPATOCELLULAR CARCINOMA" (ePoster and Poster paper Communication, @ EASL Conference, Barcelona 13th-17th April 2016.; Awarded by Nemany A. Hanafy ILC Bursary Registration).**

114. N.A.N. Hanafy, A. Quarta, M.M. Ferraro, A. Gaballo, L. Dini, C. Nobile, M.L. De Giorgi, S. Carallo, C. Citti, G. Cannazza, A.L. Capodilupo, G. Ciccarella, R. Rinaldi, G. Giannelli, and S. Leporatti "Polymeric Nano-micelles as Novel Tools for LY2157299 Cancer Cells Delivery" 50th Annual Scientific Meeting of the European Society for Clinical Investigation (ESCI) Paris, France 27-29 April 2016 (Oral Communication).
115. Cinzia Buccoliero, Dario Consolante, Francesco Dituri, Serena Mancarella, Nemany Hanafy, Angelo Mancinelli, Paolo Trerotoli, Stefano Leporatti, Claudio Pisano, Gianluigi Giannelli "A TGF-B RECEPTOR I KINASE INHIBITOR, GALUNISERTIB (LY2157299) INHIBITS HEPATOCELLULARCARCINOMA PROGRESSION IN IN VIVO EXPERIMENTAL MODELS" (ePoster Communication, @ EASL Conference, Barcelona 13th-17th April 2016).
116. Nemany A.Hanafy, Marzia Maria Ferraro, Antonio Gaballo, Luciana Dini, Vittorianna Tasco, Concetta Nobile, Maria Luisa De Giorgi, Sonia Carallo, Ross Rinaldi and Stefano Leporatti "Fabrication and Characterization of ALK1Fc-Loaded Fluoro-Magnetic Nanorods for inhibiting TGF  $\beta$ 1 in Hepatocellular Carcinoma (HCC)" Nanomedicine Congress Viterbo 2016, Viterbo 21-23 September 2016 (Poster Communication, accepted).
117. Nemany A. Hanafy, Alessandra Quarta, Ricardo Di Corato, Luciana Dini, Concetta Nobile, Maria Luisa De Giorgi, Sonia Carallo, Mariafrancesca Cascione, Ross Rinaldi, Isabel Fabregat and Stefano Leporatti "Hybrid Polymeric-protein nano-carriers (HPPNC) for targeted delivery of TGF $\beta$  inhibitor to hepatocarcinoma cells" Nanomedicine Congress Viterbo 2016, Viterbo 21-23 September 2016 (Poster Communication, accepted).
118. Stefano Leporatti "Polymeric Nano-carriers as novel tools for TGF- $\beta$  inhibitors delivery to Cancer Cells" International Workshop, Nano-Oncology: Chemistry meets Bio, IRCCS" Istituto Tumori Giovanni Paolo II-Bari" Bari 12<sup>th</sup> -13<sup>th</sup> December 2016 (Contributing Talk).
119. Nemany A.Hanafy , Marzia Maria Ferraro , Antonio Gaballo Luciana Dini Vittorianna Tasco, Concetta Nobile , Maria Luisa De Giorgi, Sonia Carallo, Ross Rinaldi and Stefano Leporatti "Fabrication and Characterization of ALK1Fc-Loaded Fluoro-Magnetic Nanorods for inhibiting TGF  $\beta$ 1 in Hepatocellular Carcinoma (HCC)." Materials 2016, Sheraton Catania Hotel Aci Castello (Catania) 12<sup>th</sup>-16<sup>th</sup> December 2016 (Poster Communication, accepted).
120. Nemany A. Hanafy, Alessandra Quarta, Ricardo Di Corato, Luciana Dini, Concetta Nobile, Maria Luisa De Giorgi, Sonia Carallo, Mariafrancesca Cascione, Ross Rinaldi, Isabel Fabregat and Stefano Leporatti "Hybrid Polymeric-Protein Nano-Carriers (HPPNC) for targeted delivery of TGF $\beta$  inhibitor to hepatocarcinoma cells" (Oral Communication, accepted). Materials 2016, Sheraton Catania Hotel Aci Castello (Catania) 12<sup>th</sup>-16<sup>th</sup> December 2016.

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

121. **M. Ambrico, L. Blasi, F. Calabi, G. Cicala, L.L. del Mercato, A. De Giacomo, S. Leporatti, I.E. Palamà, A. Quarta, V. Vergaro, A. Zacheo** "MUltifunctional TherANostic NanosysTems for mEdicine (MUTANTE)" (**Contributing Talk**). **II CNR Nanotec Institute Meeting**, Hotel S. Michele 3<sup>rd</sup>-4<sup>th</sup> May 2017 Cetraro (CS) Italy.
122. **Stefano Leporatti** "Halloysite Clay Nanotubes as Nanobazooka for Drug delivery" **225<sup>th</sup> ACS Meeting 18<sup>th</sup>-22<sup>nd</sup> March 2018, New Orleans (USA)** (**Oral Communication**).
123. **Stefano Leporatti** "Halloysite Clay Nanotubes: Nanobazookas for Drug delivery" **TNT 2018 Conference - Trends in Nanotechnology Conference, 03-07 September 2018 Lecce (Italy)** (**Oral Communication, accepted**).
124. **Stefano Leporatti** "Halloysite clay nanotubes: nano-bazookas for drug delivery" **Materials 2018, Bologna 22<sup>nd</sup>-26<sup>th</sup> October 2018** (**Oral Communication**).
125. **Stefano Leporatti** "Halloysite clay nanotubes as nano-bazookas against cancer" **Workshop on Technology Transfer in Nanotechnology, Lecce 18-19 October 2018** (**Poster Communication**).
126. **E. Panzarini, B.A. Tenuzzo, S. Mariano, Nemany A.N. Hanafy, A. Quarta, S. Leporatti, L. Dini** "Therapeutic effect of polymeric nano-micelles formulation of galunisertib (LY2157299) on CCl4-induced liver fibrosis in rats" **Proceedings of the 65th Congress of the GEI - Italian Society of Development and Cell Biology (GEI-SIBSC) 38th Congress of the Italian Society of Histochemistry (SII) 24-27 June 2019, Polo Villarey, Ancona, Università Politecnica delle Marche** (**Oral Communication**).
127. **Francesca Persano, Concetta Nobile, Giuseppe Gigli and Stefano Leporatti** "Calcium carbonate nanoparticle as promising theranostic system: tuning the physical-chemical properties" **EDGE-Tech: Emerging and Disruptive next-GEneration Technologies for POC online workshop @CNR Nanotec -Istituto di Nanotecnologia, Lecce (Italy) 26<sup>th</sup>-27<sup>th</sup> October 2020** (**e-Poster Communication**).
128. **Elisa Panzarini, Stefano Leporatti, Bernardetta Anna Tenuzzo, Alessandra Quarta, Nemany A. N. Hanafy, Gianluigi Giannelli, Camilla Moliterni, Diana Vardanyan, Carolina Sbarigia, Stefano Tacconi, Marco Fidaleo, Luciana Dini** "Polymeric nanomicelles formulation of LY2157299-Galunisertib improves therapeutic outcome by greater reducing fibrosis and ameliorating fatty degeneration in a CCL4-induced hepatic- fibrosis rat-model" **International Liver Congress 2022 (London, 22-26 June 2022)** (**Poster Communication**).
129. **Francesca Persano and Stefano Leporatti** "Nanoparticle-based Drug Delivery in Cancer Therapy" **Workshop "CNR Nanotec meets CRT MERLN"** 29.09.2022-30.09.2022, @ CNR Nanotec Lecce (Italy). (**Oral Communication**).
130. **Stefano Leporatti** "Atomic Force Microscopy as Diagnostic Tool in the War Against Cancer: Overview and Insight in the Future" **NANO In BIO 2024 (4th Edition)** Le Goisier, Guadeloupe (French Caribbean) 14-20 April 2024. (**Oral Communication**).
131. **Stefano Leporatti** "Bio-hybrid atomic force microscope as weapon against cancer: A dive into the future." **110° Congresso Nazionale Società Italiana di Fisica, Bologna 9<sup>th</sup> -13<sup>th</sup> September 2024** (**Oral Communication**).

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

### Invited Talks:

1. "Ultrathin Polyelectrolyte Multilayer Capsules Texture: a Scanning Force Microscopy (SFM) and Confocal Laser Scanning Force Microscopy (CLSM) study" December, 11<sup>th</sup> 2000, Department of Microelectronics & Nanoscience Liquid Crystal Physics Chalmers, University of Technology & Goteborg University S - 412 96, Goteborg, Sweden.
2. "Nanostructures, stability, and mechanical properties of Layer-by-Layer Assembled Polyelectrolyte Multilayer Capsules" December, 21<sup>th</sup> 2000 University of Genoa, Department of Physics, Via Dodecaneso, 33, 16146 Genoa (Italy).
3. **Stefano Leporatti, Sergio E. Moya, Guido Koehler, Christian Bitterlich, Martin Fischlechner, Edwin Donath, Ross Rinaldi** "Lipid layers for Biocomposite Colloids \_Novel Devices with Biological Functions" Nanomech-06, Materials Science and Materials Mechanics at the Nanoscale, Bari 19-23 November 2006.
4. **S. Leporatti, V. Arima, G. Maruccio, L.L. del Mercato, E. Primiceri, A. Antonaci, V. Frascerra, N. Sgarbi, A. Aloisi, F. Calabi, R. Cingolani, R. Rinaldi** "SPM characterization of self-assembled materials for nano-biotechnology applications" Veeco Italian User Meeting, University of Milan Bicocca 15 -16 May 2007.
5. **Stefano Leporatti, Daniele Vergara, Antonella Zacheo, Viviana Vergaro, Giuseppe Maruccio, Roberto Cingolani and Ross Rinaldi**. "Cytomechanical and topological investigation of cancer cells by Scanning Force Microscopy (SFM)". March 12<sup>th</sup> 2008, Consiglio Nazionale delle Ricerche (CNR)-Istituto di Microelettronica e Microsistemi (IMM), Stradale Primosole 50, 95121 Catania (Italy) Veeco Meeting 2008 "Morphological-Functional Characterisation and Surface Modification by Probe Microscopy"
6. **Stefano Leporatti, Antonella Zacheo, Daniele Vergara, Viviana Vergaro, Giuseppe Maruccio, Yuri M. Lvov, Roberto Cingolani and Ross Rinaldi** "Engineering microenvironment by layer-by-layer biocomposite films for breast cancer cells-controlled growth: Morphostructure and cytomechanics study". Division of Polymeric Materials: Science and Engineering Symposium "Nanoassembly - From Fundamentals to Applications" August 17-21, 2008, Philadelphia, PA, 236<sup>th</sup> American Chemical Society Meeting
7. **S. Leporatti** "Engineering Micro\Nano environment by Layer-by-Layer Biocomposites for Cancer Cells Controlled Growth: Morphostructure and Cytomechanics Study" 4<sup>th</sup> December 2008 Ruston, Institute for Micromanufacturing, Louisiana Tech University, Ruston (Louisiana).
8. **Viviana Vergaro, Zhiguo Zheng, Elshad Abdullayev, Yuri M. Lvov, Giovanna Giovinazzo, Angelo Santino, Roberto Cingolani, Ross Rinaldi and Stefano Leporatti** "Nanocarriers for Cancer Therapy" Oporto (Portugal) Engineering Department of Porto University, 12th October 2009 Oporto (Portugal).

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

9. **Viviana Vergaro, Zhiguo Zheng, Elshad Abdullayev, Yuri M. Lvov, Giovanna Giovinazzo, Angelo Santino, Roberto Cingolani, Ross Rinaldi and Stefano Leporatti** "Nanotechnology for Cancer Therapy: Cytomechanical Changes induced by Drug-loaded Carriers Uptake by Neoplastic Cells". **Max Planck Institute of Colloids and Interfaces SummerSchool,Albufeira (Portugal) October 4th-11th 2009.**
10. **S. Leporatti** "Polyelectrolyte MicroCapsules and Halloysite NanoTubes as Carriers for Sustained Drug Delivery" **Istituto Nazionale Tumori, Milano 29th January 2010.**  
<http://www.rai.tv/dl/RaiTV/programmi/media/ContentItem-b1b45e45-8bcf-47d1-b0ef-837f4c01dcf0.html?p=0>
11. **S. Leporatti** "Nanotechnology for Cancer Therapy: NanoCarriers and BioMechanics" **Centro Ricerche Medicina Sperimentale, Laboratorio Immunologia dei Tumori, Università di Torino (Ospite Franco Novelli), Turin 1st of March 2010.** (dott-mm.campusnet.unito.it/corsi/corsi.pdf).
12. **Viviana Vergaro, Elshad Abdullayev, Andre Zeitoun, Giovanna Giovinazzo, Angelo Santino, Roberto Cingolani, Yuri M. Lvov and Stefano Leporatti** "Halloysite Nanotubes and Nanocolloids: High payload drug nanocarriers " **Particles 2010 Lake Buena Vista, Orlando, FL (USA) May 22-25, 2010.** (<http://nanoparticles.org/Particles2010/>)
13. **Viviana Vergaro, Xingcai Zhang, Yuri M. Lvov, and Stefano Leporatti** "Nanocarriers for Cancer Therapy" **Christmas Workshop 2010, Dipartimento di Fisica dell'Università di Genova 23th December 2010.** ([http://www.fisica.unige.it/vattuone/II\\_Christmas\\_workshop.html](http://www.fisica.unige.it/vattuone/II_Christmas_workshop.html)).
14. **Viviana Vergaro, Elshad Abdullayev, Yuri M. Lvov and Stefano Leporatti** "Halloysite Nanotubes: Novel Carriers for Cancer Therapy" **241th ACS National Meeting, Anaheim, CA,( USA) March 27-31, 2011; Clay / polymer composites: from nanoplates to nanotubes. Symposium.** (<http://pmse.sites.acs.org/meetings.htm>)
15. **Viviana Vergaro, Zhiguo Zheng, Xingcai Zhang, Giuseppe Maruccio, Yuri M. Lvov, and Stefano Leporatti** "Nanotechnnology for Cancer Therapy: Nanocarriers and Cytomechanics" **Second World Conference on Nanomedicine and Drug Delivery (WCN-2011) March 11, 12 and 13, 2011 Kottayam, Kerala, India.**
16. **Viviana Vergaro, Xingcai Zhang, Yuri M. Lvov, Claudia Bellomo, Daniele Vergara, Michele Maffia, Francesca Baldassarre, Gianluigi Giannelli and Stefano Leporatti** "Nanotechnology for Cancer Therapy: Nanocarriers and Cytomechanics"  
Centre for Integrative Biology (CIBIO), University of Trento, Mattarello (Trento) 14th April 2011.
17. **Paride Papadia, Giuseppe Ciccarella, Viviana Vergaro, Giovanna Lucarelli and Stefano Leporatti** "Biopolymeric Carriers for Nanomedical Applications" **Biopolymers: Structure and Dynamics. A Biophysical Workshop, Brno (Checzh Republ), 21th-23th October 2011.**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- 18 **Stefano Leporatti** “NANOTECHNOLOGY FOR CANCER THERAPY: WHERE WE ARE AND WHERE WE ARE GOING” 13th January 2011, Department of Physics, University of Milan (Italy).
- 19 **Stefano Leporatti** “Nanotecnologia contro il Cancro: dove siamo e dove stiamo andando” Nanotech Festival 2012, Colleretto Giacosa, 19th April 2012 (in Italian Language).
- 20 **Stefano Leporatti** "In the Living cell investigations Using AFM and CLSM Application to the Sciences" Invited Workshop with Lectures and Lab experiences Nanoscopy Science center (NSC) Kuwait University, Faculty of Science, Kuwait City, Kuwait 22th-24th April 2012.
- 21 **Stefano Leporatti** "Nanotechnology against Cancer: where we are and where we are going" Max Planck Institute of Colloids and Interfaces, Postdam (Germany) 18th July 2012.
- 22 **Stefano Leporatti** "Nanotechnology for Cancer Therapy: where we are and where we are going" University of Leipzig, Institute of Medical Physics and Biophysics Leipzig (Germany) 20th July 2012.
- 23 **Stefano Leporatti** "La dimensione NANO in Medicina" Scuola Annuale GNB "Approccio integrato per la medicina rigenerativa" Bressanone (TN) 16<sup>th</sup>-20<sup>th</sup> September 2013 (Lectio Magistralis).
- 24 **Stefano Leporatti** "Nanotechnology and new biotechnologies" VI M.O.M.T. SCIENTIFIC WORKSHOP ON “MULTIDISCIPLINARY TEAM MANAGEMENT OF ONCOLOGICAL PATIENTS” October 2013, 11-12 Centro Congressi – Grand Hotel Costa Brada, Gallipoli (Lecce), Italy.
- 25 **Stefano Leporatti** “Nanomeccanica per la Nanomedina” Scuola Nazionale SIOF- Seconda Scuola Nazionale di Biosensori Ottici e Biofotonica, Otranto 15<sup>th</sup> -20<sup>th</sup> September 2014 (Lezione ad Invito)
26. **Mf. Cascione and S. Leporatti** “CAT (Confocal-AFM-TIRF) Microscopy 3D Investigation of Cells and Targeted Drug delivery” Fotonica 2014, Napoli 12<sup>th</sup> -14<sup>th</sup> June 2014 (Invited Oral Communication).
27. **Stefano Leporatti** “Nanotechnology aganist cancer: from Drug Delivery to Cytomechanics” CNR-Istituto di Ottica Applicata (INOA), Pozzuoli (NA), 26<sup>th</sup> June 2014.
28. **Stefano Leporatti** “Nanotechnology against cancer: from Drug Delivery to Cytomechanics” Methodist Research Institute Houston (USA) 20<sup>th</sup> October 2014.
29. **Stefano Leporatti** " Atomic Force Microscopy for Biological and Material Science Applications" Invited Workshop with two Lectures and Lab experiences Nanoscopy Science center (NSC) Kuwait University, Faculty of Science, Kuwait City, Kuwait 9th-11th March 2015.
30. **Stefano Leporatti** “Nanocarriers and Cytomechanics for Cancer Therapy” VIII M.O.M.T. MEDITERRANEAN CONGRESS ON ONCOLOGICAL PATHOLOGY” October 2015, 9-10 Centro Congressi – Grand Hotel Costa Brada, Gallipoli (Lecce), Italy.
31. **Chiara Dionisi, Nemany A.N. Hanafy, Viviana Vergaro, Yuri M. Lvov and Stefano Leporatti** “Halloysite Clay Nanotubes as Novel Carriers for Drug Delivery Euroclay 2015, Edinburgh 6<sup>th</sup> -10<sup>th</sup> July 2015 (Keynote Talk)

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

- 32. Stefano Leporatti "Nanocarriers for Nanomedicine Drug Delivery" *Nanoscience and Nanotechnology 2015 Laboratori Nazionali of Frascati INFN, 28<sup>th</sup> September-2<sup>nd</sup> October 2015, Frascati (Rome)* (Invited Talk).**
- 33. Stefano Leporatti "La Nanomedicina nella Terapia contro il Cancro" *Giornata sul Tumore al Seno, Aula Magna Collegio Volta, Pavia, 20<sup>th</sup> November 2015.* (Invited Lecture)**
- 34. Stefano Leporatti "Polymeric Nano-carriers as novel tools for TGF-beta inhibitors delivery to HCC Cells" "TGF-beta family in fibrosis and cancer" *IT-LIVER Final Conference Barcelona, 14-15, June, 2016.* (Invited Talk).**
- 35. Stefano Leporatti "Nano-carriers per il Delivery di Farmaci Antitumorali: Possibili Sviluppi in Radioterapia" convegno: "Il Cyberknife e gli sviluppi terapeutici derivanti dall'aumento dell'accuratezza nell'irradiazione dei tessuti" *Mater Dei Hospital, Bari (BA), 8<sup>th</sup> April 2017,* (Invited Talk).**
- 36. Stefano Leporatti "Polymeric Nano-carriers as novel tools for TGF-β inhibitors delivery to HCC Cells" Leipzig University, Institute fur Medizinische Physik und Biophysik, **15<sup>th</sup> June 2017** (Invited Talk).**
- 37. Stefano Leporatti "Nanomaterials for Biomedicine", Universitaet fuer Bodenkultur, (BOKU) University of Natural Resources and Life Science, Muthgasse 11, 1190 Wien (Austria) **29<sup>th</sup> January 2018** (Invited Talk).**
- 38. Stefano Leporatti "Nanocarriers for Nanomedicine" @Workshop "Ricerca e Nanomedicina" Dipartimento di Chimica, Università of Pavia, Viale Taramelli 12 Pavia **14<sup>th</sup> June 2018** (Invited Talk).**
- 39. Stefano Leporatti "Nanovectors for Nanomedicine" @Workshop "Nanotechnology-based research products: how to translate them into Nanomedicines", Pavia, 13-15 Luglio 2020 **14<sup>th</sup> July 2020** (Invited Talk). (post-poned due to COVID pandemic).**
- 40. Stefano Leporatti " Nanocarriers for Nanomedicine" @CNR Nanotec, Lecce, **28<sup>th</sup> April 2021** (Invited Webinar).**
- 41. Stefano Leporatti "Inorganic Nanocarriers for Cancer Therapy" @ Workshop di Ricerca e Nanomedicina, Pavia, **15<sup>th</sup> July 2021** (Invited Talk, as Webinar).**
- 42. Stefano Leporatti "Nanotrasportatori per Terapia Antitumorale" @Webinar Cycles "Tumore al Seno: Sconfiggerlo Con Nanosfere d'oro Intelligenti" Pavia, **30<sup>th</sup> June 2021** (Invited Webinar).**

### **Outreach**

#### **Interviews and press release (Italian Language)**

1. [http://ansa.it/scienza/notizie/rubriche/tecnologie/2012/03/09/visualizza\\_new.html\\_129317457.html](http://ansa.it/scienza/notizie/rubriche/tecnologie/2012/03/09/visualizza_new.html_129317457.html)
2. [http://bari.repubblica.it/cronaca/2012/03/08/news/il\\_cnr\\_vara\\_super\\_microscopio\\_in\\_3d\\_servir\\_a\\_svelare\\_tutti\\_i\\_segreti\\_delle\\_cellule-31179393/](http://bari.repubblica.it/cronaca/2012/03/08/news/il_cnr_vara_super_microscopio_in_3d_servir_a_svelare_tutti_i_segreti_delle_cellule-31179393/)
3. [http://www.cometta.it/zeiss/tgl.mp4 \(\*\*TG1 ore 20, confidential link\*\*\)](http://www.cometta.it/zeiss/tgl.mp4)
4. <http://corrieredelmezzogiorno.corriere.it/lecce/notizie/cronaca/2012/9-marzo-2012/tumori-salento-arriva-catil-supermicroscopio-3d-2003611741263.shtml>
5. <http://www.nano.cnr.it/upload/relpress/allegato/134.tif>
6. <http://www.nano.cnr.it/upload/relpress/allegato/135.tif>
7. [http://www.corriere.it/scienze\\_e\\_tecnologie/12\\_marzo\\_20/supermicroscopio-campanelli\\_6ed66ce8-71de-11e1-b597-5e4ce0cb380b.shtml](http://www.corriere.it/scienze_e_tecnologie/12_marzo_20/supermicroscopio-campanelli_6ed66ce8-71de-11e1-b597-5e4ce0cb380b.shtml)

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

8. <http://www.rai.tv/dl/RaiTV/programmi/media/ContentItem-a976e908-8c33-4a1c-aa12-e155eae3afaa-tgr.html#p=0> (**TG3 Regione Puglia minute 14<sup>th</sup>**)
9. <http://www.tgr.rai.it/dl/tgr/regioni/PublishingBlock-4d3a91af-a664-4722-84df-0bdae278da09.html?idVideo=ContentItem-4ee7fcf5-072f-495a-ac41-955cbc4f386f&idArchivio=Buongiorno> (**TG3 Buongiorno Regione minute 23th**)
10. <http://www.rai.tv/dl/RaiTV/programmi/media/ContentItem-98818790-cbae-4100-a59d-9c07a272287d.html> (**TG Leonardo minute 4<sup>th</sup>**)
11. <http://iunisa.unisa.it/podcast-16-0-6.html?tag=Stefano%20Leporatti&act=filter> (**Radio Interview in the middle**)
12. [http://medlinetv.org/home/index.php?option=com\\_content&view=category&layout=blog&id=9&Itemid=40](http://medlinetv.org/home/index.php?option=com_content&view=category&layout=blog&id=9&Itemid=40) (at **beginning-Medline TV-Radio Interview**)
13. <http://www.rainews24.rai.it/it/video-gallery.php?newsid=145027&videoid=28249> (**Space Lab -Rainews-31th May 2012**)
14. <http://www.youtube.com/watch?v=ODUod3IrKpg&context=C44406dcADvjVQaIPpcFMDTe5dvqCwBI20IKLstNjT232yShDbZjY=> (Nanotech Festival, Colleretto Giacosa, 19th April 2012)
15. <http://www.belpaeseweb.it/archivio.asp> (Anno XIV, n. 564, 16.05.2015) (**Cover Picture and Interview @ Pag. 6-7**).

#### **Posters**

**Mariafrancesca Cascione, Daniele Vergara, Antonio Gaballo, Giuseppe Maruccio, Ross Rinaldi and Stefano Leporatti**

"Il Gatto che graffia la cellula: la Nanomeccanica per la Nanomedicina"  
**Notte dei Ricercatori, Lecce 26<sup>th</sup> September 2014.**

**Nemany Hanafy, Concetta Nobile, Maria Luisa de Giorgi, Ross Rinaldi, and Stefano Leporatti "Nanocarriers per la Nanomedicina" Notte dei Ricercatori, Lecce 26<sup>th</sup> September 2014.**

**Nemany Hanafy and Stefano Leporatti "Nanopillole per la Terapia Antitumorale" Settimana della Cultura Scientifica, Nanotechnology Day, CNR Nanotec Istituto di Nanotecnologia, Lecce, 11<sup>th</sup> April 2017.**

#### **Spin-off\Patents\Industrial Applications**

**Finalist: Start Cup Puglia 2010, "Pharmacological Innovative Drug Tracking, (Pharmatracking)"**

**Finalist: Nanochallenge and Polymer Challenge 2012 "TARGETED DELIVERY OF NATURAL ANTI-NEOPLASTIC DRUGS THROUGH TAILORED NANO-ENCAPSULATION FOR ONCOLOGY APPLICATIONS" Team Innova Nano, Venice November 2012**

**Finalist: From Lab to the Market @ Nanotechitaly 2013 "HIGH-PAYLOAD AND BIOCOMPATIBLE NANOCAPSULES FOR DELIVERING PACLITAXEL TO CANCER PATIENTS" Team CUBE Labs Nano, Venice November 2013**

#### **Workshops:**

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia c/o Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**1) " Minisymposium of Scanning Probe Microscope " (III° Cycle Romand en Science Biologiques )  
Istitute of Histology -Pèrolles- University of Friburg (Switzerland) 28th April 1993.**

**2) " 1<sup>st</sup> Digital Instruments Italian Users Meeting " (Lot Oriel Italia)  
Ospedale San. Raffaele Milan (Italy) 4th July 1995.**

**3) " 1<sup>st</sup> Digital Instruments German Users Meeting " (Digital Instrument GmbH, Mannheim)  
Physics Institute of Hamburg University (Germany) April 1996.**

**4) " 2<sup>nd</sup> Digital Instruments German Users Meeting " (Digital Instrument GmbH, Mannheim)  
Physics Institute of Münster University (Germany) February 1997.**

**5) 1<sup>st</sup> International Workshop “Scanning Probe Microscopy in Life Sciences” (JPK Instruments GmbH,  
Nanotechnology for Life Science)  
University Clinik Charite’ Medical Faculty of Humboldt University, Berlin 10<sup>th</sup>  
September 2002.**

**6) “Picoforce- for special Applications of Force Spectroscopy in PicoNewton range” (Veeco Instruments  
GmbH, Mannheim)  
Max Planck Institute of Colloids and Interfaces, Golm (Potsdam), 9<sup>th</sup> October 2002.**

**7) 2<sup>nd</sup> International Workshop “Scanning Probe Microscopy in Life Sciences” (JPK Instruments GmbH,  
Nanotechnology for Life Science)  
University Clinik Charite’ Medical Faculty of Humboldt University, Berlin 18<sup>th</sup>  
September 2003.**

**8) 3<sup>rd</sup> International Workshop “Scanning Probe Microscopy in Life Sciences” (JPK Instruments GmbH,  
Nanotechnology for Life Science)  
University Clinik Charite’, Medical Faculty of The Humboldt University, Berlin 13<sup>th</sup>  
October 2004.**

**9) 4<sup>th</sup> International Workshop “Scanning Probe Microscopy in Life Sciences” (JPK Instruments GmbH,  
Nanotechnology for Life Science)  
University Clinik Charite’, Medical Faculty of The Humboldt University, Berlin 13<sup>th</sup>  
October 2005.**

**10) 2M Strumenti-Veeco "Caratterizzazione nanomeccanica quantitativa delle superfici  
tramite microscopia a sonda in scansione" Dipartimento di Chimica Università degli  
Studi di Bari 11<sup>th</sup> March 2010.**

**11) 2M Strumenti-Veeco User Meeting 2010, Dipartimento di Fisica, Università  
della Sapienza di Roma, 16 September 2010.**

**12) 1° AFMeeting 2015: Incontro Utenti Italiani di Microscopia a Forza Atomica (AFM)  
24-25 febbraio 2015 Bruker Italia srl – Viale Vincenzo Lancetti 43, 20158 Milano.**

**13) "Zeiss Microscopy Technology and Complete Correlative Workflow" @ CNR Nanotec c/o  
Campus Ecotekne-Via Monteroni Lecce - Wendsday 19th July 2017.**

**14) "Zeiss Microscopy Technology for Life Science and Complete Correlative Workflow" @ CNR  
Nanotec c/o Campus Ecotekne-Via Monteroni Lecce - 05-07 June 2018.**

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia c/o Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**15) LeBiotec2019: Convegno scientifico dei giovani ricercatori “Ricerca e innovazione nelle Biotecnologie” 26<sup>th</sup> september 2019 –University of Salento, @ Biotechnology c/o Campus Ecotekne-Via Monteroni Lecce.**

**16) ICONS-A symposium on Colloidal Nanocrystals Fundamentals and Perspectives 10-11 October 2019 @ CNR Nanotec c/o Campus Ecotekne-Via Monteroni Lecce.**

**Peer Reviewer (an average of about 20 reviews per year completed)**

<https://publons.com/researcher/880659/stefano-leporatti>

Chemical Physics Letters (since 2001)

Acta Biomaterialia (since 2010)

Synthetic Metals (since 2001)

Langmuir (since 2009)

Nanotechnology (since 2009)

International Journal of Polymer Science (since 2009)

Journal of Biomechanics (since 2009)

Nanomedicine (Future Medicine) (since 2010)

ACS Nano (since 2012)

Science of Advanced Materials (since 2010)

Biomacromolecules (since 2010)

ACS Applied Materials and Interfaces (since 2013)

Expert Opinion on Drug Delivery (since 2010)

Bioinorganic Chemistry and Applications (since 2011)

Journal of Colloid and Interface Science (since 2011)

Journal of Micromechanics and Microengineering (since 2011)

Current Drug Delivery (since 2012)

Colloids and Surface B: Biointerfaces (since 2012)

Journal of Physics D: Applied Physics (since 2012)

ISRN: Nanotechnology (since 2012)

Sensors (since 2012)

Chemical Engineering (since 2012)

Molecular Pharmaceutics (since 2012)

Current Pharmaceutical Design (since 2012)

Chinese J. of Chemistry (since 2012)

Macromolecular Bioscience (since 2012)

Material Research Bulletin (since 2013)

Drug Delivery Letters (since 2013)

Physical Chemistry Chemical Physics (PCCP) (since 2013)

Journal of Biomedical Materials Research: Part B - Applied Biomaterials (since 2013)

Applied Surface Science (since 2013)

Chemistry Today (since 2013)

Small (since 2012)

Current Opinion in Colloid and Interface Science (since 2013)

Journal of Microencapsulation (since 2013)

International Journal of Molecular Science (since 2013)

Nanocarriers (since 2013)

Advances in Colloid and Interface Science (since 2013)

Reports on Progress in Physics (since 2013)

Anti-Cancer Agents in Medicinal Chemistry (since 2013)

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

Nanotoxicology (since 2014)  
Polymers (since 2014)  
Therapeutic Delivery (since 2014)  
J. Controlled Release (since 2014)  
Macromolecular Rapid Communication (since 2014)  
PloS One (since 2014)  
Nanoscale (since 2015)  
Environmental Science: Nano (since 2014)  
Mini-Reviews in Medicinal Chemistry (since 2015)  
Revista Mexicana de Fisica (since 2014)  
Beilstein Journal of Nanotechnology (since 2015)  
Journal of Nanobiotechnology (since 2015)  
Polymer Bulletin (since 2015)  
Colloids and Surfaces A (since 2015)  
Membranes (since 2015)  
Advanced Healthcare Materials (since 2015)  
Current Medicinal Chemistry (since 2015)  
Austin J. of Radiology (since 2015)  
Bioengineering (since 2015)  
Cancers (since 2015)  
Nanomaterials (since 2015)  
Clay Minerals (since 2015)  
Biomedicines (since 2016)  
RSC Advances (since 2016)  
International Journal of Molecular Sciences (since 2012)  
Materials (since 2016)  
Microscopy Research and Technique (since 2016)  
Arabian Journal of Chemistry (since 2016)  
Biomedical Materials (since 2016)  
Molecules (since 2016)  
Molecular Pharmaceutics (since 2012)  
IEEE Transactions on Nanotechnology (since 2016)  
Polymer Engineering & Science (since 2016)  
Pharmaceutics (since 2014)  
European Polymer Journal (since 2016)  
Applied Science (since 2017)  
Bioconjugate Chemistry (since 2016)  
International Journal of Nanomedicine (since 2017)  
NanoFutures (since 2017)  
Journal of Nanomaterials (since 2017)  
Current Drug Targets (since 2017)  
Frontiers in Pharmacology (since 2017)  
Frontiers in Molecular Biosciences, section Nanobiotechnology (since 2017)  
Macromolecular Materials and Engineering (since 2017)  
IMed Pub Journals-Translational Biomedicine (since 2017)  
Recents Patents on Nanotechnology (since 2017)  
Molecular Therapy-Nucleic Acids (since 2017)  
Marine Drugs (since 2017)

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

**Current Pharmaceutical Biotechnology** (since 2017)

**Metals** (since 2017)

**Gels** (since 2017)

**Nano-structures & Nano-objects** (since 2017)

**Current Nanomaterials** (since 2017)

**Current Nanoscience** (since 2017)

**Journal of Drug Delivery Science and Technology** (since 2018)

**Micro- and Nanotechnology books** (Elsevier) (since 2018)

**Journal of Material Science** (since 2018).

**Chemistry - An Asian Journal** (since 2018)

**Technologies** (since 2018)

**Nutrients** (since 2018)

**Journal of the Taiwan Institute of Chemical Engineers** (since 2018)

**Advanced Science** (since 2018)

**American Journal of Translational Research** (since 2018)

**Applied Clay Science** (since 2018)

**Journal of Nanostructures in Chemistry** (since 2018)

**Frontiers in Bioengineering and Biotechnology** (since 2018)

**ChemSusChem (Chemistry & Sustainability Energy & Materials)** (since 2018)

**Nanoscale Research Letters** (since 2018)

**ACS Omega** (since 2019)

**Micromaschine** (since 2019)

**Nanotoxicology** (since 2019)

**Biomechanics and Modelling in Mechanobiology** (since 2019)

**Nanotheranostics** (since 2019)

**Journal of Nanobiotechnology** (since 2019)

**Cells** (since 2019)

**Biocatalysis and Agricultural Biotechnology** (since 2019)

**Journal of the Mechanical Behaviour of Biomedical Materials** (since 2019)

**Drug design, Development and Therapy** (since 2019)

**Journal of Material Research and Technology** (since 2019)

**Journal of Pharmaceutical Analysis** (since 2019)

**International Journal of Biological Macromolecules** (since 2020)

**Chemistry Select** (since 2020)

**Investigative Radiology** (since 2020)

**Cancer Nanotechnology** (since 2020)

**Scientific Reports** (since 2020)

**Advanced Science** (since 2020)

**Clays and Clay Minerals** (since 2021)

**Micron** (since 2021)

**Bioinorganic Chemistry and Applications** (since 2021)

**Nanotechnology Reviews** (since 2021)

**The Chemical Record** (since 2021)

**Pharmacological Reports** (since 2023)

**Materials Today** (since 2023)

**Helyion** (since 2023)

**Drug and Chemical Toxicology** (since 2023)

**Italian Ministry of University and Research (MIUR) Referee (Revisore MIUR)** (since 2012)

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

Programma per Giovani Ricercatori "Rita Levi Montalcini" (**Revisore Cineca**) (since 2015)  
Fondo Crescita Sostenibile Ministero Sviluppo Economico, Referee (**Revisore FCS-MISE**)  
(since 2022)  
National Science Centre, Poland (**Reviewer**) (Since 2015)  
FCT - Fundação para a Ciência e a Tecnologia, (CNR Portugais) (**Project Referee**, since 2012)  
American University of Beirut, Department of Chemistry, Faculty of Arts and Sciences,  
(**Project Referee**, since 2017).  
National Center of Science and Technology Evaluation (NCSTE), Kazakhstan (**Project Referee**, since 2017).  
Austrian Science Fund (FWF) (**Project Referee**, since 2017).  
Deutsche Forschungsgemeinschaft (German Research Foundation) (**Project Referee**, since 2018).  
Science Fund of the Republic of Serbia (**PROMIS Project Referee**, since 2019).  
Spanish State Research Agency (**Biomedicine Sector Referee**, since 2020).

### Society Member

American Chemical Society (ACS)  
Italian Physical Society (SIF)  
Italian Biophysical Society (SIBPA)  
German Physical Society (DPG)

Member of Editorial Board of **ISRN Biomedical Imaging** since 12/2012  
Member of Editorial Board of **Frontiers in Molecular Biosciences** since 11/2013  
Member of Editorial Board of **Frontiers in Bioengineering and Biotechnology** since 11/2013  
Member of Editorial Board of **Frontiers in Materials** since 11/2013  
Member of Editorial Board of **Scanning** since 05/2017  
Member of Editorial Board of **Current Nanomaterials** since 03/2018  
Member of Editorial Board of **International Journal of Molecular Sciences** since 03/2018 (2018-2020)  
Member of Editorial Board of **Cancers** since 08/2018 (2018-2020)  
Member of Editorial Board of **Polymers** since 06/2019 (2019-2021)  
Member of Editorial Board of **Journal of Personalised Medicine** since 05/2020 (2020-2022)

### Guest\Co-Guest Editor

- Special Issue in **Nanomaterials** entitled:  
"Nanocolloids for Nanomedicine and Drug Delivery"  
[http://www.mdpi.com/journal/nanomaterials/special\\_issues/Nanocolloids\\_Nanomedicine](http://www.mdpi.com/journal/nanomaterials/special_issues/Nanocolloids_Nanomedicine).  
(deadline 30 April 2018)

- Special Issue in **Cancers** entitled:  
"Nanotechnology and Cancer"  
[http://www.mdpi.com/journal/cancers/special\\_issues/nanotechnology](http://www.mdpi.com/journal/cancers/special_issues/nanotechnology)  
(deadline 31 May 2018)

- Special Issue in **Polymers** entitled:  
"Polymer Clay Nano-composites"  
[http://www.mdpi.com/journal/polymers/special\\_issues/polymer\\_clay\\_composites](http://www.mdpi.com/journal/polymers/special_issues/polymer_clay_composites)

Prof. Stefano Leporatti  
CNR NANOTEC – Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

(deadline 31 March 2019)

- Special Issue in **International Journal of Molecular Sciences** entitled:

"Biomechanics of Cell Membrane"

[http://www.mdpi.com/journal/ijms/special\\_issues/biomechanics\\_cell\\_membrane](http://www.mdpi.com/journal/ijms/special_issues/biomechanics_cell_membrane)

(deadline 15 November 2019)

- Special Issue in **Nanomaterials** entitled:

"Impact of Nanomaterials in Biological Systems and Applications in Nanomedicine Field"

(deadline 31 Nov 2021)

[https://www.mdpi.com/journal/nanomaterials/special\\_issues/biological\\_nanomedicine](https://www.mdpi.com/journal/nanomaterials/special_issues/biological_nanomedicine)

- Special Issue in **Frontiers in Bioengineering and Biotechnology** entitled:

"Functionalized Nanocarriers for Theranostics"

<https://www.frontiersin.org/research-topics/11236/functionalized-nanocarriers-for-theranostics>

(deadline 29 May 2020)

- Special Issue in **Polymers** entitled:

"Polymer Clay Nano-composites II"

[https://www.mdpi.com/journal/polymers/special\\_issues/Polymer\\_Clay\\_Nano\\_composites\\_II](https://www.mdpi.com/journal/polymers/special_issues/Polymer_Clay_Nano_composites_II)

(deadline 31 May 2021)

- Special Issue in **Polymers** entitled:

"Polymeric Nanocomposites as Nanomedicine Tools against Infectious Disease Outbreaks"

[https://www.mdpi.com/journal/polymers/special\\_issues/polym\\_nanocompos\\_nanomed](https://www.mdpi.com/journal/polymers/special_issues/polym_nanocompos_nanomed)

(deadline 31 Aug 2021)

- Special Issue in **International Journal of Molecular Sciences** entitled:

"Morpho-Mechanical Approach to Characterize the Neurodegenerative Progression"

[https://www.mdpi.com/journal/ijms/special\\_issues/morphomechanical\\_neurodegenerative](https://www.mdpi.com/journal/ijms/special_issues/morphomechanical_neurodegenerative)

(deadline 30 May 2022)

- Special Issue in **International Journal of Molecular Sciences** entitled:

"Impact of Engineered Nanomaterials on Cell Mechanics"

[https://www.mdpi.com/journal/ijms/special\\_issues/nanomaterials\\_cellmechanics](https://www.mdpi.com/journal/ijms/special_issues/nanomaterials_cellmechanics)

(deadline 30 May 2022)

- Special Issue in **Pharmaceutics** entitled:

"Nanomedicine to Enhance Innate and Adaptive Anticancer Immunity"

[https://www.mdpi.com/journal/pharmaceutics/special\\_issues/nanomedicine\\_anticancer\\_immunity](https://www.mdpi.com/journal/pharmaceutics/special_issues/nanomedicine_anticancer_immunity)

(deadline 30 April 2022)

- Special Issue in **International Journal of Molecular Sciences** entitled:

"Molecular Advances in Cell Mechanics "

[https://www.mdpi.com/journal/ijms/special\\_issues/83IF9147BJ](https://www.mdpi.com/journal/ijms/special_issues/83IF9147BJ)

(deadline 20 October 2023)

- Special Issue in **Journal of Personalized Medicine** entitled:

"Nanomedicine in Cancer Targeting and Therapy"

[https://www.mdpi.com/journal/jpm/special\\_issues/FE2OK7CX2I](https://www.mdpi.com/journal/jpm/special_issues/FE2OK7CX2I)

(deadline 31 October 2023)

- Special Issue in **Frontiers in Bioengineering and Biotechnology** entitled:

"Functionalized Nanocarriers for Theranostics II"

<https://www.frontiersin.org/research-topics/41330/functionalized-nanocarriers-for-theranostics-volume-ii> (deadline 28 July 2023)

- Special Issue in **Frontiers in Bioengineering and Biotechnology** entitled:

"Cancer Nanoformulations"

Prof. Stefano Leporatti  
CNR NANOTEC– Istituto di Nanotecnologia  
Polo di nanotecnologia clo Campus Ecotekne  
Via Monteroni  
73100 Lecce (LE) – Italy  
Ph: +39 0832 3 19829  
Fax: +39 0832 3 19901

[https://www.frontiersin.org/research-topics/57115/cancer-nanoformulations?utm\\_source=F-RTM&utm\\_medium=TEDI&utm\\_campaign=PRD\\_TEDI\\_TI\\_RT-TITLE](https://www.frontiersin.org/research-topics/57115/cancer-nanoformulations?utm_source=F-RTM&utm_medium=TEDI&utm_campaign=PRD_TEDI_TI_RT-TITLE) (Deadline 27 August 2024)

-Collection in **Discover Nano** entitled: “Advances in Nanoparticle-Mediated Drug Delivery for Cancer Therapeutics” <https://link.springer.com/collections/fhgcadijgc> (deadline 31 October 2024)

-Special Issue in **Cancers** entitled: "Research Advances in Cancer Nanomedicine" [https://www.mdpi.com/journal/cancers/special\\_issues/55II2HX865](https://www.mdpi.com/journal/cancers/special_issues/55II2HX865) (deadline 1 April 2025).

-Special Issue in **Pharmaceutics** entitled: " Extracellular Vesicle-Based Delivery System for Cancer and Neurodegenerative Disease Treatment" [https://www.mdpi.com/journal/pharmaceutics/special\\_issues/605L18FQTE](https://www.mdpi.com/journal/pharmaceutics/special_issues/605L18FQTE) (deadline 31 January 2025)

-Special Issue in **International Journal of Molecular Sciences** entitled:

"Molecular Perspectives in Nanomedicine" [https://www.mdpi.com/journal/ijms/special\\_issues/406EDUP847](https://www.mdpi.com/journal/ijms/special_issues/406EDUP847) (deadline 28 February 2025)

Autorizzo il trattamento dei miei dati personali contenuti in questo curriculum ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 (Legge 675/96) "Codice in materia di protezione dei dati personali".

Lecce, 3<sup>rd</sup> March 2025

Stefano Leporatti

*Stefano Leporatti*