

LAURA CHRONOPOULOU

Curriculum Vitae

Part I – General Information

Full Name	Laura Chronopoulou
Spoken Languages	italian, greek, english, french
Scopus Author ID	22939972100
ORCID	https://orcid.org/0000-0002-2178-9608

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	2006	Sapienza University of Rome- Chemistry Department	5-year Degree in Chemistry. Title of the thesis: “Bioconiugati lipasi-nanoparticelle polimeriche: sintesi, caratterizzazione e impiego in processi di biocatalisi”. Final mark: 110/110
PhD	2009	Sapienza University of Rome- Chemistry Department	PhD in Materials Science. Title of the thesis: “Bioconiugati enzima-nanoparticella polimerica: sintesi, caratterizzazione ed applicazioni biotecnologiche”
ASN	2020	MIUR	National Scientific Abilitation (Abilitazione Scientifica Nazionale alle funzioni di Professore Universitario di Seconda Fascia per il settore concorsuale 03/C2, Chimica Industriale, SSD: CHIM/04)
Expert teacher qualification	2024	Sapienza University of Rome- Gruppo di lavoro Qualità e Innovazione della Didattica (QUID)	Completion of the V edition of the 2-year QUID course organized by Sapienza University

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
Nov 2006	Oct 2009	Sapienza University of Rome- Chemistry Department	PhD scholarship of the Italian Ministry of Instruction and Research (MIUR). Title of the research: “Bioconiugati enzima-nanoparticella polimerica:

			sintesi, caratterizzazione ed applicazioni biotecnologiche”
Mar 2010	Feb 2014	Sapienza University of Rome- Chemistry Department	Post-doctoral fellow (Assegnista di ricerca ai sensi dell’art. 51, comma 6, della legge 27 dicembre 1997, n. 449). Title of the research: “Sintesi e caratterizzazione di materiali nanoibridi a base polimerica per applicazioni biotecnologiche”
May 2014	Oct 2015	Sapienza University of Rome- C.E.R.I. Research Center for the prevision, prevention and control of geological risks	Research scholarship (Borsa di studio per attività di ricerca). Title of the research: “Sviluppo e caratterizzazione di materiali a supporto di processi biotecnologici per la bonifica di falde contaminate”
May 2016	Apr 2017	Sapienza University of Rome- Chemistry Department	Research scholarship (Borsa di studio per attività di ricerca). Title of the research: “Sviluppo e caratterizzazione di materiali a supporto di processi biotecnologici per la bonifica di falde contaminate”
Oct 2017	Sep 2019	Sapienza University of Rome- Chemistry Department	Post-doctoral fellow (Assegnista di ricerca, Categoria B-Tipologia II-settore concorsuale 03/C2, ai sensi dell’art. 22 della legge 30 dicembre 2010, n. 240). Title of the research: “Approcci innovativi di chimica verde per il recupero di PHA da cellule microbiche”
Oct 2019	Nov 2020	Sapienza University of Rome- Chemistry Department	Post-doctoral fellow (Assegnista di ricerca, Categoria B-Tipologia II-settore concorsuale 03/C2, ai sensi dell’art. 22 della legge 30 dicembre 2010, n. 240). Title of the research: “Estrazione mediante fluidi supercritici e caratterizzazione di composti fenolici da reflui oleari”
Jan 2021	Dec 2021	Sapienza University of Rome- Chemistry Department	Post-doctoral fellow (Assegnista di ricerca, Categoria B-Tipologia II-settore concorsuale 03/C2, ai sensi dell’art. 22 della legge 30 dicembre 2010, n. 240). Title of the research: “Biosintesi di idrogeli compositi per applicazioni nel trattamento delle infiammazioni osteoarticolari”
Jun 2022	May 2025	Sapienza University of Rome- Chemistry Department	Fixed term researcher (RTDB art. 24 c.3-b L. 240/10) in Industrial Chemistry, SSD CHEM-04/A

Start	End	Institution	Position
2013	2021	MDPI, Elsevier, Hindawi Publishing Corporation, RSC Publishing	Reviewer for the journals: Journal of Drug Delivery Science and Technology, Colloids and Surfaces B: biointerfaces, International Journal of Biological Macromolecules, Colloids and Surfaces A: physicochemical and engineering aspects, Journal of Materials Chemistry B, Materials, Polymers, Materials Science and Engineering C, Biomed Research International, Nanomedicine, Frontiers, Gels
2016	2016	European Society of Colloids and Interface Science	Member of the staff of the 30th Conference of the European Colloid and Interface Society, held in Rome (I) on 4-9/09/2016
2019	2019	Sapienza University of Rome	Member of the “Laboratorio Zio Tungsteno” of the Chemistry Department of the Sapienza University of Rome: organization of laboratory activities for children and youth during the event “Primo Levi: la chimica narrata” on 10/05/2019 and during the 2019 edition of the European Researchers’ Night
2020	2022	Sapienza University of Rome	Appointment as Expert on the subject (Cultore della materia) for the course BIO E NANOMATERIALI PER APPLICAZIONI TECNOLOGICHE of the Master Degree in Biotechnology and Genomic for Industry and Environment of the Sapienza University of Rome
2020	ongoing	MDPI	Member of the Reviewer Board of the journal Gels (ISSN: 2310-2861)
2021	2022	MDPI	Lead Guest-Editor of the Special Issue “Hydrogel nanocomposites for biomedical applications” of the journal Micro (ISSN: 2673-8023)
2021	ongoing	Sapienza University of Rome	Co-inventor (inventive contribution: 30%) of the patent “Metodo per il recupero e la purificazione di PHA da colture microbiche miste” deposited by Sapienza University of Rome
2021	ongoing	MDPI	Member of the Editorial Board of the journal Micro (ISSN: 2673-8023)
2021	2022	Polymer Networks Group	Referee for the evaluation of the

			abstracts submitted to the Conference PNG 2022 Polymer Networks Group, to be held in Rome (Italy) on 12-16 June 2022
2022	ongoing	Sapienza University of Rome	Member of the Research Center for Applied Sciences to the safeguard of Environment and Cultural Heritage (CIABC)
2022	ongoing	Sapienza University of Rome-Chemistry Department	Member of the Area Educational Board (CAD) in Chemical Sciences
2023	ongoing	Sapienza University of Rome-Chemistry Department	Member of the Area Educational Board (CAD) in Industrial Chemistry
2023	ongoing	Sapienza University of Rome-Department of Chemical Engineering Materials Environment-PhD in Chemical Processes for Industry and the Environment	Member of the Scientific Board of the PhD program
2024	ongoing	Sapienza University of Rome-Department of Chemical Engineering Materials Environment-PhD in Chemical Processes for Industry and the Environment	Member of the Quality Committee of the PhD program
2024	2024	Sapienza University of Rome-Chemistry Department	Member of the Organizing Committee of the 2nd Symposium for YouNg Chemists: Innovation and Sustainability (SYNC 2024), Rome 24-28 June 2024
2025	ongoing	Sapienza University of Rome-Chemistry Department	Member of the Equal Opportunities Committee of the Department

Part IV – Teaching experiences

IV_A – Teaching in Bachelor and Master degrees

Year	Institution	Lecture/Course
2021/22	Sapienza University of Rome	Chimica Industriale II [1022399] Bachelor Degree in Industrial Chemistry L-27, 9 CFU
2022/23	Sapienza University of Rome	Chimica Industriale I [10596326] Bachelor Degree in Chemical Sciences L-27, 5 CFU of 9 CFU
2022/23	Sapienza University of Rome	Laboratorio di Macromolecole [1020324] Master Degree in Industrial Chemistry LM-71, 1 CFU of 9 CFU, for laboratory activities
2023/24	Sapienza University of Rome	Chimica Industriale I [10596326] Bachelor Degree in Chemical Sciences L-27, 5 CFU of 9 CFU
2023/24	Sapienza University of Rome	Materiali Sostenibili per l'Industria e l'Ambiente [10612110] Master Degree in

		Industrial Chemistry LM-71, 6 CFU
2024/25	Sapienza University of Rome	Chimica Industriale I [10596326] Bachelor Degree in Chemical Sciences L-27, 5 CFU of 9 CFU
2024/25	Sapienza University of Rome	Materiali Sostenibili per l'Industria e l'Ambiente [10612110] Master Degree in Industrial Chemistry LM-71, 6 CFU

IV_B – Supervision of Master Thesis

Year	Institution	
2022/23	Parma University, Department of Chemistry, Life Sciences and Environmental Sustainability	Supervisor of the Thesis in Genomic, Molecular and Industrial Biotechnologies [LM-8] by L. Antenucci “Biosintesi di idrogeli peptidici compositi per applicazioni in ambito biomedico”
2023/24	Sapienza University of Rome-Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [LM-71] by G. Perfili “Applicazione dei fluidi supercritici nella valorizzazione di scarti dell'industria alimentare: estrazione di carotenoidi da bucce di pomodoro”

IV_C – Co-Supervision of Master Thesis

Year	Institution	
2023/24	Sapienza University of Rome-Chemistry Department	Co-supervisor of the Thesis in Industrial Chemistry [LM-71] by P.S. Pintilei “Impiego di idrogel peptidici contenenti nanoparticelle magnetiche nella rimozione di coloranti da mezzi acquosi”
2023/24	Sapienza University of Rome-Chemistry Department	Co-supervisor of the Thesis in Industrial Chemistry [LM-71] by D. Petrilli “Recupero di terre rare da batterie NiMH a fine vita mediante tecniche di estrazione tradizionali e innovative”
2023/24	Sapienza University of Rome-Chemistry Department	Co-supervisor of the Thesis in Industrial Chemistry [LM-71] by M. Gioiosa “Formulazione di liposomi multicomponente per la veicolazione di farmaci innovative per il trattamento del melanoma umano”
2023/24	Sapienza University of Rome-Chemistry Department	Co-supervisor of the Thesis in Industrial Chemistry [LM-71] by E. Bianchini “Liposomi multicomponente per l'incapsulamento di microRNA: un approccio innovativo al trattamento del melanoma umano”

IV_D – Supervision of Bachelor Thesis

Year	Institution	
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by V. Malivindi “Bioetanolo come alternativa ai combustibili fossili: tecnologie e futuri scenari di utilizzo”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by M. Stefano “Sintesi microfluidica di nanoparticelle polimeriche per la veicolazione di sostanze antifungine”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by D. Petrilli “Sintesi green di idrogeli compositi per la veicolazione di secretoma da cellule di placenta umana”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by F. Miracapillo “Nanomateriali a base biopolimerica per applicazioni in terapia genica”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by B. Di Mattia “Idrogeli compositi ad azione antibatterica: sintesi e caratterizzazione per applicazioni biomediche”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by A. Servidio “Potenzialità delle microalghe per la fissazione della CO ₂ in un' ottica di economia circolare”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by E. Bianchini “Impiego di liquidi ionici nello sviluppo di nuove tecnologie di cattura della CO ₂ ”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by D. Lanera “Stato dell'arte della produzione di biodiesel mediante l'uso di enzimi lipolitici”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by P. Martorelli “Produzione e funzionalizzazione di bioplastiche antimicrobiche per applicazioni nel packaging industrial”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by E. Digorgio “Tecnologie di produzione di microalghe per processi sostenibili”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by M. Boattini “Le zeoliti e le loro applicazioni in campo ambientale”

2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by E. Antonelli “Processi di produzione di biodiesel a partire da oli esausti”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by L. Lupidii “Idrogeno: produzione e sviluppo di una risorsa ecosostenibile alternativa ai combustibili fossili”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by M. Chimento “Produzione di combustibili sintetici mediante conversione elettrochimica di CO ₂ e processo Fischer-Tropsch”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by G. Pisano “Sistemi iniettabili innovativi per la rigenerazione del tessuto osteoarticolare”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by M. Gionta “Valorizzazione di biomasse residuali per la produzione di bioplastiche in un'ottica di economia circolare”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by R. Trione “Valorizzazione della CO ₂ attraverso processi di metanazione”
2021/22	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by V. Carrone “Tecniche microfluidiche per la sintesi di nanoparticelle per la veicolazione di sostanze bioattive”
2022/23	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by D. Marucci “Processi e strategie innovative per la produzione sostenibile di ammoniaca”
2022/23	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by G. Patti “Bioproduzione innovativa di energia e plastiche mediante la tecnica CRISPR-Cas”
2022/23	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by G. Di Giorgio “Produzione di bioetanolo partire da scarti alimentari in una prospettiva di economia circolare”
2022/23	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by A. Dessì “Smaltimento delle materie plastiche: da rifiuti indesiderati a risorse”
2022/23	Sapienza University of Rome-	Supervisor of the Thesis in Industrial

	Chemistry Department	Chemistry [L-270] by C. Grossi “Le microalghe come sistema innovativo per la fissazione e l'utilizzo della CO ₂ ”
2022/23	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by C. Forgetta “Bioproduzione di biodiesel attraverso l'uso di enzimi lipolitici immobilizzati su Metal Organic Frameworks”
2022/23	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Industrial Chemistry [L-270] by F. G. Petrillo “La produzione di Idrogeno Verde: chiave di volta per l'energia sostenibile del future”
2023/24	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Chemical Sciences [L-270] by L. Bettella “Utilizzo di idrogeno verde per la produzione di acciaio sostenibile”
2023/24	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Chemical Sciences [L-270] by F. Crupi “Processi waste-to-hydrogen: verso la valorizzazione dei rifiuti per la produzione sostenibile di idrogeno”
2023/24	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Chemical Sciences [L-270] by F. Fazzi “La desolforazione nell'industria petrolchimica: un approccio microbiologico”
2023/24	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Chemical Sciences [L-270] by A. Paoletti “Verso un future verde: l'idrogeno come nuovo carburante per motoveicoli”
2023/24	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Chemical Sciences [L-270] by L. Barone “Tecniche CCUS applicate al piano Net Zero Emission 2050: analisi della cattura e della conversione di CO ₂ in E-fuel”
2023/24	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Chemical Sciences [L-270] by V. Santigli “Miscanthus: una risorsa sostenibile per la produzione di biomassa energetica”
2023/24	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Chemical Sciences [L-270] by A. L. Giammaria “Processi sostenibili di pretrattamento di biomasse lignocellulosiche con CO ₂ supercritica”
2023/24	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Chemical Sciences [L-270] by C. Del Sole “Sintesi di idrogeli peptidici per applicazioni nel settore biomedico”
2023/24	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Chemical Sciences [L-270] by C. Vitozzi “Il biossido di titanio come catalizzatore nelle reazioni fotocatalitiche per il trattamento delle acque reflue”

2024/25	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Chemical Sciences [L-270] by E. Mattei “Valorizzazione energetica delle biomasse lignocellulosiche: il caso studio di Empyro a Hengelo”
2024/25	Sapienza University of Rome- Chemistry Department	Supervisor of the Thesis in Chemical Sciences [L-270] by E.J. Parisi “Metanolo e DME nei processi di decarbonizzazione energetica”

IV_E – Participation to Examination Committees

Year	Institution	Lecture/Course
2021/22	Sapienza University of Rome- Chemistry Department	Member of Examination Committees for Bachelor’s Degree in Chemical Sciences and Industrial Chemistry and for Master's Degree in Chemistry, Industrial Chemistry and Analytical Chemistry
2022/23	Sapienza University of Rome- Chemistry Department	Member of Examination Committees for Bachelor’s Degree in Chemical Sciences and Industrial Chemistry and for Master's Degree in Chemistry, Industrial Chemistry and Analytical Chemistry
2023/24	Sapienza University of Rome- Chemistry Department	Member of Examination Committees for Bachelor’s Degree in Chemical Sciences and Industrial Chemistry and for Master's Degree in Chemistry, Industrial Chemistry and Analytical Chemistry
2023/24	Sapienza University of Rome- Chemistry Department	Member of Examination Committees for the selection of research fellows (borsa di ricerca junior BS-J 24/2023, contratto di collaborazione esterna ICE 23/2023, assegno di ricerca AR-B 27/2023)
2024/25	Sapienza University of Rome- Chemistry Department	Member of Examination Committees for Bachelor’s Degree in Chemical Sciences and Industrial Chemistry and for Master's Degree in Chemistry, Industrial Chemistry and Analytical Chemistry
2024/25	Sapienza University of Rome- Chemistry Department	Member of Examination Committees for the selection of research fellows (assegni di ricerca AR-B 06/2024, AR-B 12/2024, AR-B 36/2024)
2024/25	Sapienza University of Rome- Department of Chemical Engineering Materials Environment	Member of the Examination Committee for the selection of PhD candidates in Chemical Processes for Industry and the Environment

IV_F – Other teaching experiences

Year	Institution	Lecture/Course
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2016	Istituto Superiore di Sanità	Peptidi auto-assemblanti per la rigenerazione tissutale. 3 rd course on BIOMATERIALI: APPLICAZIONI DI RIGENERAZIONE TISSUTALE IN ODONTOSTOMATOLOGIA E ORTOPIEDIA, held in Rome (Italy) on 20–21/10/2016
2017	Istituto Superiore di Sanità	Idrogeli a base peptidica: nuovi biomateriali per l'ingegneria tissutale. 4th course on Biomaterials (BIOMAT2017) Tecnologie innovative in odontoiatria, chirurgia maxillo-facciale e ortopedia, held in Rome (Italy) on 26-27/10/2017
2018	Istituto Superiore di Sanità	Idrogeli compositi per applicazioni di ingegneria tissutale. 5th course on Biomaterials (BIOMAT2018) Biomateriali e metodiche di rigenerazione tissutale in odontoiatria, chirurgia maxillo-facciale e ortopedia, held in Rome (Italy) on 11-12/10/2018
2019	Istituto Superiore di Sanità	Scaffold a base di idrogeli compositi per l'ingegneria tissutale. 6th course on Biomaterials (BIOMAT2019) Biomateriali, metodiche di rigenerazione tissutale e strumentazione per la realizzazione di dispositivi utilizzati in odontoiatria, chirurgia maxillo-facciale e ortopedia, held in Rome (Italy) on 17–18/10/2019
2021	Istituto Superiore di Sanità	Scaffold compositi a base di idrogeli e nanomateriali per applicazioni di ingegneria tissutale. 7th course on Biomaterials (BIOMAT2021) Biomateriali e metodiche di rigenerazione tissutale in odontoiatria, chirurgia maxillo-facciale e ortopedia, held in Rome (Italy) on 28-29/10/2021
2022	Istituto Superiore di Sanità	Sistemi iniettabili e nanomateriali per applicazioni in ingegneria tissutale. 8th course on Biomaterials (BIOMAT2022) Biomateriali e metodiche di rigenerazione tissutale in odontoiatria, chirurgia maxillo-facciale e ortopedia, held in Rome (Italy) on 27-28/10/2022
2023	Sapienza University of Rome- Department of Chemical Engineering Materials Environment-PhD in Chemical Processes for Industry and the Environment	Novel biobased biomaterials for industrial applications, 1 CFU, for PhD students
2024	Sapienza University of Rome- Teaching and Learning Center	Didattica della Chimica applicata alla realtà, 1 CFU, Teacher training courses (Percorsi formazione insegnanti a.a. 2023/24)

Part V - Society memberships, Awards and Honors

Year	Title
2010-ongoing	Member of Centro Interuniversitario per le Biotecnologie (responsible of the Operative Unit: prof. Cleofe Palocci)
2012	Award “Premio Dipartimento di Chimica” at the Quinto Convegno Giovani-la Chimica per lo Sviluppo, held in Rome (Italy) on 12-13/06/2012
2015	Best Oral Presentation award at the 8th European Symposium on Biopolymers, held in Rome (Italy) on 15-18/09/2015

Part VI - Funding Information

Year	Title	Program	Grant value
2008	Sintesi e caratterizzazione di scaffolds altamente porosi, nanoparticelle a base polimerica e loro materiali compositi. Role: Participant. PI: Prof. M. Dentini	PRIN 2008	€100.000
2009	Biotechnologie per il rilascio sito specifico di molecole per l'igiene orale. Role: Participant. PI: Prof. M. Castagnola	Progetto di Ricerca Industriale e Sviluppo sperimentale, Bando Filas Bioscienze 2009	€166.650
2011	Biomateriali innovativi per l'ingegneria tissutale e la veicolazione di molecole bioattive. Role: Participant. PI: Prof. M. Dentini	Progetti di Ateneo 2011	€37.818
2012	Ruolo dello stress ossidativo nell'alterazione dell'omeostasi muscolare e approccio terapeutico mediate antiossidanti veicolati da liposomi specifici. Role: Participant. PI: Dr. V. Moresi	FIRB 2012 Futuro in Ricerca	€1.063.421
2012	Novel biomaterials for tissue engineering and the controlled delivery of bioactive molecules. Role: Participant. PI: Prof. M. Dentini	Progetti di Ateneo 2012	€40.000
2013	Sintesi di nanoparticelle magnetiche coreshell per il trattamento di biofilm batterici. Role: Principal Investigator	Progetto di Avvio alla Ricerca 2013	€2.000
2013	Nuovi vettori nanobiopolimerici per la veicolazione di molecole di difesa contro funghi patogeni in <i>Vitis vinifera</i> . Role: Participant. PI: Prof. G. Pasqua	Progetto di Ateneo 2013	€13.000
2014	An improved therapeutic effect of	Progetto di Ateneo 2014	€11.000

	doxorubicin embedded into PLGA-based nanobiopolymeric vectors: in vitro effect on breast cancer cell line and circulating tumor Cell. Role: Participant. PI: Dr. I. Silvestri		
2015	Development and characterization of reactive materials for groundwater remediation. Role: Participant. PI: Prof. M. Petrangeli Papini	Progetto di Ateneo 2015	€25.000
2016	New insight into microfluidic assisted production of nano and micro beads for biotechnological applications. Role: Participant. PI: Prof. C. Palocci	Progetto di Ateneo 2016	€11.000
2017	Materiali innovativi nella bonifica di falde acquifere contaminate: caratterizzazione, reattività e ipotesi di implementazione tecnologica. Role: Participant. PI: Prof. M. Petrangeli Papini	Progetto di Ateneo 2017	€11.000
2017	Tecnologie "green" per una agricoltura sostenibile: protezione da fitopatogeni e fertilizzanti di colture agroalimentari mediante biomolecole ottenute da reflui oleari. Acronym: ABASA (Agricultural By-products into valuable Assets for Sustainable Agriculture). Role: Participant. PI: Prof. D. Bellincampi	Progetti Regione Lazio 2017	€150.000
2017	Resources from Urban Biowaste. Acronym: Res Urbis. Role: Participant. PI: Prof. M. Majone	EU Horizon 2020	€3.000.000
2017	Immunomodulatory properties of the Amniotic Stromal cell SEcretome: from Multi-omics profiling to nanotechnoLogy-aided delivery for controlled release in osteoarthritis. Acronym: ASSEMbLe. Role: Participant. PI: Prof. O. Parolini	Progetto PRIN 2017	€656.490
2018	I fluidi supercritici nelle attività di downstream di processi biotecnologici: applicazione nella estrazione di PHAs da cellule microbiche. Role: Participant. PI: Prof. C. Palocci	Progetto di Ateneo 2018	€14.000
2018	Network CIB: Catalisi dell'innovazione nelle	MIUR - Progetti Competitivi 2018	€125.000

	biotecnologie. Un approccio “glocal” alle bioraffinerie di terza generazione. Role: Participant. PI: Prof. L. Pollegioni		
2019	Innovative approaches for controlling Botrytis cinerea, causal agent of the grey mold disease in tomato by using poly(lactic-co-glycolic acid) nanoparticles for the controlled release of the antifungal fluopyram. Role: Participant. PI: Prof. G. Pasqua	Progetto di Ateneo 2019	€39.000
2020	A new life for plastic waste: conversion into polyhydroxyalkanoates via an integrated physical-chemical and biotechnological process. Role: Participant. PI: Prof. M. Majone	Progetto di Ateneo 2020	€48.000
2020	Innovazioni Bio e Nanotecnologiche nel de-restauro, conservazione e restauro sostenibile dei Manufatti in Legno dei Beni Culturali. Casi studio su campioni archeologici, storico-artistici e dell’arte contemporanea (Bionanoinlegno). Role: Participant. PI: Prof. M. Romagnoli	DTC Lazio-Progetti RSI	€37.000
2020	Protezione della Bioedilizia in legno: IOT e nanomateriali per lo stoccaggio di carbonio. Role: Participant. PI: Prof. C. Palocci	Gruppi di Ricerca 2020 -Lazio Innova-Green Chemistry	€66.741
2021	Biosintesi di idrogeli compositi a base peptidica contenenti nanoparticelle d'argento per applicazioni biomediche. Role: Principal Investigator	Progetto di Avvio alla Ricerca 2021	€2.200
2022	AgriLoop: Pushing the frontier of circular agriculture by converting residues into novel economic, social and environmental opportunities. Role: Participant. PI: Prof. M. Villano	HORIZON-CL6-2022-CIRCBIO-01-05 - EU-China international cooperation on unlocking the potential of agricultural residues and wastes for circular and sustainable bio-based solutions	€7.825.297,50
2022	Nanoparticelle d'argento ed idrogeli peptidici: messa a punto di approcci "green" per la sintesi di compositi avanzati per applicazioni biomediche. Role: Participant. PI: Prof. C. Palocci	Progetto di Ateneo 2022	€12.000
2022	Peptides Hydrogels incorporating	Progetto PRIN PNRR 2022	€223.923

	Graphene Oxide modulate intra-articular Hyaluronic acid delivery: advanced treatment for Knee Osteoarthritis (HYGO-HYKO). Role: Participant. PI: Prof. C. Palocci		
2023	Novel biotechnological strategies for greener biodiesel production. Role: Principal Investigator	Progetto di Ateneo 2023	€3.600
2023	La tutela ambientale e del patrimonio storico artistico: gli obiettivi di una società sostenibile nella comunicazione scientifica e artistica con realtà sociali esterne e ristrette. Role: Participant. PI: Prof. C. Palocci	Progetti Terza Missione Ateneo Sapienza 2023	€11.000
2024	Multicomponent mirRNA-lipid nanovectors by microfluidic synthesis: unravelling structure-performance relationships. Role: Participant. PI: Prof. C. Palocci	Progetto di Ateneo 2024	€58.860

Part VII – Research Activities

*In brackets the reference as reported in the publication list

Research line: **Bioproduction of peptide-based hydrogels for biotechnological applications**

Keywords

Hydrogels
Self-assembly
Composites
Scaffolds
Biosynthesis

Brief Description

Hydrogel materials, thanks to their biocompatibility and biodegradability, are very promising for the development of new biocompatible scaffolds for controlled drug release, tissue regeneration and tissue engineering. Low molecular weight peptide-based hydrogels (LMWPGs) are an interesting class of soft materials for the preparation of versatile systems that can be easily modified, both chemically and biologically. Within the research group I am working, we developed an enzymatic approach for the preparation of injectable, self-assembling materials based on Fmoc-oligopeptides [44]. The reaction products (Fmoc peptides) spontaneously self-assemble in water to originate fibrils, that become entangled to form a three-dimensional structure of fibers with a diameter of approximately 7 nm, as evidenced by atomic force microscopy (AFM) measurements. Macroscopically, a stable, self-supporting hydrogel material is produced. We have evaluated the use of these materials as controlled drug delivery systems for a wide spectrum of bioactive molecules [33, 34, 39]. For biomedical applications, hydrogel biomaterials require adequate structural stability, sufficient mechanical properties and biocompatibility. I therefore investigated the possibility of improving the mechanical properties of the hydrogels by using cross-linking agents such as genipin, as well as unconventional aminoacid precursors or carbon-based fillers (graphene oxide). We have employed Fmoc-oligopeptide hydrogels for the preparation of composite materials specifically designed for bone tissue regeneration

[4]. These tailor-made hydrogel systems contain biopolymeric spheres delivering bioactive molecules, as well as pure and substituted calcium phosphate (CaP) nanoparticles to provide bioactivity, osteoconductivity and improved mechanical properties. The morphological and viscoelastic properties of the synthesized hydrogels were investigated by SEM and rheological measurements. The biocompatibility of the composite materials with different mammalian cells was also assessed. The injectability of the prepared materials makes them suitable for in vivo applications. Moreover, we have developed new hydrogel composites through the incorporation of graphene based nanofillers, that offer the potential to tailor the mechanical strength of the native material, adding binding sites for further bio-functionalization with biological molecules, and supplying additional properties such as conductivity for regulating cell behaviors such as cell proliferation, differentiation or protein synthesis [17]. We have used such hydrogel composites to entrap human amniotic mesenchymal stromal cells secretome, that possesses excellent anti-inflammatory properties that may be used for the treatment of osteoarthritis. We are currently studying the possibility of using a similar GO-containing composite hydrogel platform for delivering hyaluronic acid to inflamed tissues to target osteoarthritis. Another topic within this research line is the development of peptide hydrogel composites containing metallic nanoparticles, such as Ag or TiO₂ nanoparticles that confer antimicrobial properties. Antibiofilm activity studies have afforded promising results for the use of these composites as effective antibacterial agents [7,11,12]. More recently, we have developed magnetogels containing Fe₃O₄ that were able to efficiently remove different types of contaminants from aqueous phases (i.e. metal ions, organic dyes) [3,8].	
This research activity was supported by the MIUR programs PRIN 2017 (ASSEMBLe) and PRIN PNRR 2022 (HYGO-HYKO) and Sapienza University (Progetti di Ateneo 2022, Avvio alla Ricerca 2021)	
The results have been disseminated through the publication of 19 papers, 1 book chapter and the participation to more than 15 conferences (with oral or poster presentations).	
ERC codes: PE5_6; PE5_7; PE5_8; LS9_1; LS9_2	

Research line: **Supercritical fluids as green solvents for the extraction of bioactive molecules and biopolymers from biomass**

Keywords	Brief Description
Supercritical fluids	Supercritical fluids represent a sustainable alternative to organic solvents for the extraction of bioactive compounds from natural matrices (plant as well as microbial cells). Different matrices can be employed, including waste materials, that are usually regarded as worthless, but often contain precious bioactives that may be recovered. The use of waste materials may be advantageous also from an economic point of view, as their disposal represents a significant cost for many industries. Moreover, the valorization of waste materials is intimately linked to the development of a circular and sustainable economy. In this field, I conducted a study on the supercritical fluid extraction (SFE) of biomolecules like oleanolic acid from grape pomace, which represents a yet unexploited source of highly added-value
polyhydroxyalcanoate	
Waste materials	
Circular economy	
biomass	

products [48]. This SFE technique proved successful in extracting oleanolic acid from grape pomace samples, with extraction yields that were comparable with conventional, yet sometimes disadvantageous, techniques such as solid-liquid extraction. Also, I have investigated the SFE of bioactives from waste materials derived from olive oil manufacturing, a major economic activity in Mediterranean countries [22]. In recent years, aquatic species such as microalgae have been identified as a promising source of vitamin K, carotenoids, and other fat-soluble vitamins and great attention has been focused on rapid, selective, and environmentally friendly extraction methods for their recovery. I recently studied the possibility of extracting carotenoids and fat-soluble vitamins from *T. obliquus* with SFE [24]. I investigated the effect of several parameters such as the CO₂ physical variables, the addition of co-solvents (methanol and limonene) and of an inert dispersing phase on the recovery of different carotenoids and fat-soluble vitamins. SFE was compared with conventional extraction methods in terms of yield and selectivity. In particular, a remarkable selectivity was observed when SFE was carried out in the presence of ethanol at 10 MPa and 40 °C: under these conditions, it was possible to isolate menaquinone-7, a homologous of vitamin K₂, which, otherwise, cannot be recovered by using traditional extraction procedures. Another ongoing research line is focused on the extraction of biodegradable polymers (specifically polyhydroxyalkanoates, PHA) produced by mixed microbial cultures from urban wastes. In fact, while the strategies for maximizing productivity, as well as PHA intracellular content, are now known, the extraction step still remains a weak point of the process, with a wide margin of performance improvement, in terms of purity and recovery of the product, as well as thermal and mechanical properties. Our studies of PHA extraction from pure microbial cells using supercritical CO₂ permitted to obtain particularly encouraging results with PHA recovery yields between 70 and 100%. Further studies are currently focused on the valorization of residues of the food industry (i.e. tomato peels and seeds) towards a circular economy.

This research activity was supported by the EU (Horizon 2020-RES URBIS and Agriloop projects), Regione Lazio (ABASA project), MIUR (program Progetti Competitivi 2018-Network CIB: Catalisi dell'innovazione nelle biotecnologie) and Sapienza University (progetti di Ateneo 2018).

The results have been disseminated through the publication of 4 papers, 2 book chapters and the participation to 2 conferences (poster presentations). One patent has been developed and deposited.

ERC codes: PE5_7; LS9_5; LS9_6

Research line: **Innovative bulk and microfluidic technologies for the fabrication of biopolymeric micro or nanoparticles and liposomes or biotechnological applications**

Keywords

Nanoprecipitation

Microfluidics

Drug delivery

Brief Description

Currently, one of the major problems in liquid phase synthetic processes of nanostructured polymeric materials in bulk systems is the control of the size and polydispersion of the obtained nanoparticles, which, together with the

Gene delivery	difficulty of standardizing the physico-chemical reaction conditions, severely limit the scale up of these technologies. The research group I have been working with patented a membrane-based approach for the control of nanoparticle morphology and dimensions in the 100-1000 nm range. By using this simple synthetic procedure, I begun my work on the use of nanostructured polymers as carriers for enzyme immobilization. In particular, I demonstrated that the interaction with micro or nanostructured matrices can cause conformational changes in the structure of an enzymatic protein, depending on the size of the carrier, and such conformational variations may result in a modulation of the catalytic properties as well as of the stability of the biocatalyst. More recently, I have turned my attention to the use of flow focusing microfluidic reactors for the synthesis of nanomaterials. In this field one of my research lines was focused on the development of a capillary flow microreactor, with flow-focusing mode, that was assembled by using stainless steel capillary tubes and connecting them through a cross junction [43]. Within this work, I identified and optimized the main chemico-physical parameters that control the size and polydispersion of the polymeric nanoparticles obtained with such microfluidic reactor. Following the optimization of the operating parameters, it was possible to synthesize polymeric nanoparticles in the range from 20 to 300 nm with low polydispersion index. By using the above innovative techniques, as well as more traditional ones, we have synthesized micro or nanomaterials with controlled dimensions and features (eg. core-shell nanoparticles, surface-decorated particles, fluorescent nanoparticles, drug-loaded micro or nanoparticles), tailored for different biotechnological applications [14]. An innovative research line is dedicated to the development of biodegradable nanostructured systems for the delivery of bioactives against plant pathogens, for a more sustainable agriculture [1, 9, 13]. In fact, nanoscale particles have properties which can allow to increase the agrochemical efficiency of pesticides, fertilizers and genetic material, delivering them in a controlled and sustained manner. Nanodelivery could significantly reduce the indiscriminate use of conventional pesticides and ensure their safe application. My research activity is currently exploring the interaction of nanosize materials with crop plants and common pathogenic fungi. Another research line has focused on the development of composites for advanced bioremediation applications, combining the well-known reducing properties of Zero-valent Iron (ZVI) towards chlorinated pollutants and a slow-releasing carbon source such as polyhydroxybutyrate (PHB) [36]. Batch experiments confirmed that nanosized ZVI/PHB particles are not only more stable but also more reactive towards perchloroethene (PCE) and Cr(VI) in comparison with the bare nanosized ZVI. These results suggested that PHB can be developed as an inexpensive and environmentally friendly material for the stabilization of nanosized ZVI particles. Part of the current research focus is on micro and nanostructured gene delivery systems (e.g. siRNAs) for the treatment of cancer and HIV, employing both nanoparticles as well as multicomponent liposomes [5]. Another recent research line is dedicated to the development of smart nanostructured materials and composites for cultural heritage applications (e.g. anti-graffiti materials, wood protectants).
Enzyme immobilization	
Biopolymers	
This research activity was supported by MIUR (PRIN 2008, FIRB 2012), Regione Lazio (Progetto di Ricerca Industriale e Sviluppo sperimentale	

2012 Bando Filas Bioscienze, DTC Lazio 2021, Lazio Innova) and Sapienza University (progetti di Ateneo 2011, 2012, 2013, 2014, 2016, 2017, 2019, 2024, Awards 2015, Avvio alla Ricerca 2013).
The results have been disseminated through the publication of 30 papers, 1 book chapter and the participation to more than 16 conferences (with oral or poster presentations).
ERC codes: PE4_18; PE5_10; PE5_15; LS9_1; LS9_2; LS9_4; LS9_5; LS9_7

Part VIII– Participation to a research group characterized by national and international collaborations

Year	Description
2006-ongoing	I have worked within the research group of Nanobiotechnologies for Industrial applications led by Prof. Cleofe Palocci at the Chemistry Department of the Sapienza University of Rome since 2006, first as a PhD student and later as a Post-doc researcher. The group is characterized by a highly interdisciplinary approach, with numerous collaborations with scientists with different backgrounds and expertise (i.e. physicists, biologists, chemical engineers), at a local, national and international level. The group has participated in various research projects, funded by Sapienza University of Rome, the Italian Ministry of Education and Research (MIUR), as well as the EU (RES URBIS and Agriloop projects). I have actively participated to all the activities of the research group, participating to its research projects, supervising students and young researchers, co-authoring scientific publications and sharing the scientific results at national and international conferences.

Part IX – Selected scientific collaborations

Name	Institution
Prof. Federico Bordi	Sapienza University of Rome-Physics Department
Prof. Gaio Paradossi	University of Rome Torvergata- Dipartimento di Scienze e Tecnologie Chimiche
Prof. Giuseppina Nocca	Catholic University of the Sacred Heart, Rome-Dipartimento di Scienze biotecnologiche di base, cliniche intensivologiche e perioperatorie
Dr. Simona Sennato	Italian National Research Council, Rome-Istituto dei Sistemi Complessi
Prof. Stefano Lupi	Sapienza University of Rome-Physics Department
Dr. Gihan Kamel	Synchrotron-light project for Experimental Science and Applications in the Middle East (SESAME)
Prof. Luciano Galantini	Sapienza University of Rome-Chemistry Department
Prof. Ilaria Cacciotti	University Niccolò Cusano, Rome-Engineering Department
Prof. Aurelio Muttini	Teramo University-Faculty of Bioscience and Agro-Food Environmental Technology
Prof. Mirella Falconi	Bologna University-Department of Experimental, Diagnostic and Specialty Medicine
Prof. Ornella Parolini	Catholic University of the Sacred Heart, Rome-Department of Life Sciences and Public Health

Prof. Ilaria Fratoddi	Sapienza University of Rome-Chemistry Department
Prof. Francesca Pagnanelli	Sapienza University of Rome-Chemistry Department
Dr. Enea Gino Di Domenico	Istituti Fisioterapici Ospitalieri, Istituto San Gallicano, Rome
Prof. Franco Mazzei	Sapienza University of Rome-Department of Chemistry and Technologies of Drug
Prof. Antonio Di Martino	Tomsk Polytechnic University-Research School of Chemistry and Applied Biomedical Sciences
Prof. Yujie Chen	Shanghai Jiao Tong University-School of Materials Science and Engineering
Prof. Vincenzo Lionetti	Sapienza University of Rome-Department of Biology and Biotechnologies 'Charles Darwin'
Prof. Ombretta Turriziani	Sapienza University of Rome-Department of Molecular Medicine
Dr. Loubna Nasri	University of Constantine 3, Algeria-Pharmaceutical Engineering Department
Prof. Marianna Villano	Sapienza University of Rome-Chemistry Department
Dr. Nadia Felli	Istituto Superiore di Sanità, Rome-Department of Oncology and Molecular Medicine
Prof. Miroslav Cernik	Technical University of Liberec, Czech Republic-Faculty of Mechatronics, Informatics and Interdisciplinary Studies
Dr. Francesco Valentino	Ca' Foscari University of Venice-Department of Environmental Sciences, Informatics and Statistics

Part IX – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	59	Scopus	2007	2025
Book chapters [scientific]	4	Scopus	2010	2025
Patents	1		2021	2025

Total Impact factor	219.818
Average Impact factor per product	3.726
Total Citations (Scopus, 27/03/2025)	1634
Average Citations per Product (Scopus, 27/03/2025)	27
Hirsch (H) index (Scopus, 27/03/2025)	24
Total number of papers in the last 5 years (2020-2024, Scopus)	22

Part X– Publications

X_A Research papers and reviews

1. K. W. Bourkeb, D. Abdessemed, B. Alaoui-Sossé, **L. Chronopoulou**, O. Baaloudj, G. Herlem. Molecularly imprinted polyaniline/carbon nanotube–modified pencil graphite electrode for selective detection of bisphenol A in various aquatic matrices. *Journal of Solid State Electrochemistry* 2025, 1. Doi: 10.1007/s10008-025-06232-1. IF 2023: 2.600.
2. C. Badiali, M. Beccaccioli, F. Sciubba, **L. Chronopoulou**, V. Petrucci, C. Palocci, M. Reverberi, A. Miccheli, G. Pasqua, E. Brasili. Pterostilbene-loaded PLGA nanoparticles alter phenylpropanoid and oxylipin metabolism in *Solanum lycopersicum* L. leaves. *Scientific Reports* 2024, 14(1), 21941. Doi: 10.1038/s41598-024-73313-y. IF 2023: 3.800.
3. F. H. Haghighi, R. Binaymotlagh, C. Palocci, **L. Chronopoulou***. Magnetic Iron Oxide Nanomaterials for Lipase Immobilization: Promising Industrial Catalysts for Biodiesel Production. *Catalysts* 2024, 14(6), 336. Doi: 10.3390/catal14060336. IF 2023: 3.771. Citations: 4 (Source: Scopus).
4. F. H. Haghighi, R. Binaymotlagh, P. S. Pintilei, **L. Chronopoulou***, C. Palocci. Preparation of Peptide-Based Magnetogels for Removing Organic Dyes from Water. *Gels* 2024, 10(5), 287. Doi: 10.3390/gels10050287. IF 2023: 5.044. Citations: 2 (Source: Google Scholar).
5. R. Binaymotlagh, F. H. Haghighi, **L. Chronopoulou***, C. Palocci. Liposome–Hydrogel Composites for Controlled Drug Delivery Applications. *Gels* 2024, 10(4), 284. Doi:10.3390/gels10040284. IF 2023: 5.044. Citations: 9 (Source: Google Scholar).
6. M. B. Arasi, G. De Luca, **L. Chronopoulou**, F. Pedini, E. Petrucci, M. Flego, A. Stringaro, M. Colone, L. Pasquini, M. Spada, V. Lulli, M. C. Perrotta, G. A. Calin, C. Palocci, M. Biffoni, F. Felicetti, N. Felli. MiR126-targeted-nanoparticles combined with PI3K/AKT inhibitor as a new strategy to overcome melanoma resistance. *Molecular Therapy* 2024, 32(1), 152–167. Doi: 10.1016/j.ymthe.2023.11.021. IF 2023: 12.100. Citations: 4 (Source: Google Scholar).
7. F. H. Haghighi, R. Binaymotlagh, I. Fratoddi, **L. Chronopoulou***, C. Palocci. Peptide-Hydrogel Nanocomposites for Anti-Cancer Drug Delivery. *Gels* 2023, 9(12), 953. Doi:10.3390/gels9120953. IF 2023: 5.044. Citations: 8 (Source: Google Scholar).
8. R. Binaymotlagh, F. H. Haghighi, E. G. Di Domenico, F. Sivori, M. Truglio, A. Del Giudice, I. Fratoddi, **L. Chronopoulou**, C. Palocci. Biosynthesis of Peptide Hydrogel–Titania Nanoparticle Composites with Antibacterial Properties. *Gels* 2023, 9(12), 940. Doi:10.3390/gels9120940. IF 2023: 5.044. Citations: 5 (Source: Google Scholar).
9. F. H. Haghighi, R. Binaymotlagh, **L. Chronopoulou**, S. Cerra, A. G. Marrani, F. Amato, C. Palocci, I. Fratoddi. Self-Assembling Peptide-Based Magnetogels for the Removal of Heavy Metals from Water. *Gels* 2023, 9(8), 621. Doi: 10.3390/gels9080621. IF 2023: 5.044. Citations: 8 (Source: Google Scholar).
10. G. De Angelis, C. Badiali, **L. Chronopoulou**, C. Palocci, G. Pasqua. Confocal Microscopy Investigations of Biopolymeric PLGA Nanoparticle Uptake in *Arabidopsis thaliana* L. Cultured Cells and Plantlet Roots. *Plants* 2023, 12(13), 2397. Doi: 10.3390/plants12132397. IF 2023: 4.436. Citations: 6 (Source: Google Scholar).
11. R. Binaymotlagh, **L. Chronopoulou**, C. Palocci. Peptide-based hydrogels: template materials for tissue engineering. *Journal of Functional Biomaterials* 2023, 14(4), 233. Doi: 10.3390/jfb14040233. IF 2023: 5.118. Citations: 16 (Source: Google Scholar).

12. **L. Chronopoulou**, R. Binaymotlagh, S. Cerra, F. H. Haghighi, E. G. Di Domenico, F. Sivori, I. Fratoddi, S. Mignardi, C. Palocci. Preparation of hydrogel composites using a sustainable approach for *in situ* silver nanoparticles formation. *Materials* 2023, 16(6), 2134. Doi: 10.3390/ma16062134. IF 2023: 3.100. Citations: 10 (Source: Google Scholar).
13. R. Binaymotlagh, A. Del Giudice, S. Mignardi, F. Amato, A. G. Marrani, F. Sivori, I. Cavallo, E. G. Di Domenico, C. Palocci, **L. Chronopoulou**. Green *in situ* synthesis of silver nanoparticles-peptide Hydrogel composites: Investigation of their antibacterial activities. *Gels* 2022, 8(11), 700. Doi: 10.3390/gels8110700. IF 2022: 4.481. Citations: 20 (Source: Google Scholar).
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15. A. Orekhova, C. Palocci, **L. Chronopoulou**, G. De Angelis, C. Badiali, V. Petrucci, S. D'Angeli, G. Pasqua, G. Simonetti. Poly-(lactic-co-glycolic) Acid Nanoparticles Entrapping Pterostilbene for Targeting *Aspergillus* Section *Nigri*. *Molecules* 2022, 27(17), 5424. Doi: 10.3390/molecules27175424. IF 2022: 4.709. Citations: 6 (Source: Scopus).
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17. **L. Chronopoulou**, F. Falasca, F. Di Fonzo, O. Turriziani, C. Palocci. siRNA transfection mediated by chitosan microparticles for the treatment of HIV-1 infection of human cell lines. *Materials* 2022, 15(15), 5340. Doi: 10.3390/ma15155340. IF 2022: 3.400. Citations: 6 (Source: Google Scholar).
18. **L. Chronopoulou**, A. Di Nitto, M. Papi, O. Parolini, M. Falconi, G. Teti, A. Muttini, W. Lattanzi, V. Palmieri, G. Ciasca, A. Del Giudice, L. Galantini, R. Zanoni, C. Palocci. Biosynthesis and physico-chemical characterization of high performing peptide hydrogels@graphene oxide composites. *Colloids and Surfaces B: Biointerfaces* 2021, 207, 111989. Doi: 10.1016/j.colsurfb.2021.111989. IF 2021: 5.785. Citations: 14 (Source: Google Scholar).
19. G. Nocca, G. D'Avenio, A. Amalfitano, **L. Chronopoulou**, A. Mordente, C. Palocci, M. Grigioni. Controlled Release of 18- β -Glycyrrhetic Acid from Core-Shell Nanoparticles: Effects on Cytotoxicity and Intracellular Concentration in HepG2 Cell Line. *Materials* 2021, 14, 3893. Doi: 10.3390/ma14143893. IF 2021: 3.748. Citations: 4 (Source: Google Scholar).
20. **L. Chronopoulou**, V. Couto Sayalero, H. Rahimi, A. Ruggetti, C. Palocci. Polymeric Nanoparticles Decorated with Monoclonal Antibodies: A New Immobilization Strategy for Increasing Lipase Activity. *Catalysts* 2021, 11(6), 744-751. Doi: 10.3390/catal11060744. IF 2021: 4.148. Citations: 6 (Source: Google Scholar).
21. **L. Chronopoulou**, I. Cacciotti, A. Amalfitano, A. Di Nitto, V. D'Arienzo, G. Nocca, C. Palocci. Biosynthesis of innovative calcium phosphate/hydrogel composites. Physicochemical and biological characterisation. *Nanotechnology* 2021, 32(9), 095102. Doi: 10.1088/1361-6528/abc5f6. IF 2021: 3.658. Citations: 24 (Source: Google Scholar).
22. **L. Chronopoulou**, F. Scaramuzza, R. Fioravanti, A. Di Nitto, S. Cerra, C. Palocci, I. Fratoddi. Noble metal nanoparticle-based networks as a new platform for lipase immobilization. *International Journal of Biological Macromolecules* 2020, 146, 790-797. Doi: 10.1016/j.ijbiomac.2019.10.047. IF 2020: 6.953. Citations: 15 (Source: Google Scholar).

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26. G. Simonetti, C. Palocci, A. Valletta, O. Kolesova, **L. Chronopoulou**, L. Donati, A. Di Nitto, E. Brasili, P. Tomai, A. Gentili, G. Pasqua. Anti-Candida Biofilm Activity of Pterostilbene or Crude Extract from Non-Fermented Grape Pomace Entrapped in Biopolymeric Nanoparticles. *Molecules* 2019, 24, 2070-2084. Doi: 10.3390/molecules24112070. IF 2019: 3.309. Citations: 43 (Source: Google Scholar).
27. **L. Chronopoulou**, F. Domenici, S. Giantulli, F. Brasili, C. D’Errico, G. Tsaouli, E. Tortorella, F. Bordini, S. Morrone, C. Palocci, I. Silvestri. PLGA based particles as “drug reservoir” for antitumor drug delivery: characterization and cytotoxicity studies. *Colloids and Surfaces B: Biointerfaces* 2019, 180, 495-502. Doi: 10.1016/j.colsurfb.2019.05.006. IF 2019: 4.670. Citations: 16 (Source: Google Scholar).
28. I. Cacciotti, **L. Chronopoulou**, C. Palocci, A. Amalfitano, M. Cantiani, M. Cordaro, C. Lajolo, C. Callà, A. Boninsegna, D. Lucchetti, P. Gallenzi, A. Sgambato, G. Nocca, A. Arcovito. Controlled release of 18- β -Glycyrrhetic Acid by nanodelivery systems increases cytotoxicity on oral carcinoma cell line. *Nanotechnology* 2018, 29, 285101-285112. Doi: 10.1088/1361-6528/aabec. IF 2018: 3.406. Citations: 53 (Source: Google Scholar).
29. **L. Chronopoulou**, M. Daniele, V. Perez, A. Gentili, T. Gasperi, S. Lupi, C. Palocci. A physico-chemical approach to the study of genipin crosslinking of biofabricated peptide hydrogels. *Process Biochemistry* 2018, 70, 110-116. Doi: 10.1016/j.procbio.2018.04.005. IF 2018: 3.062. Citations: 19 (Source: Google Scholar).
30. G. Fusco, **L. Chronopoulou**, L. Galantini, A. Zerillo, Z.M. Rasik, R. Antiochia, G. Favero, A. D’Annibale, C. Palocci, F. Mazzei. Evaluation of novel Fmoc-tripeptide based hydrogels as immobilization supports for electrochemical biosensors. *Microchemical Journal* 2018, 137, 105-110. Doi: 10.1016/j.microc.2017.10.002. IF 2018: 3.338. Citations: 19 (Source: Google Scholar).
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- polyhydroxybutyrate. *Desalination and Water Treatment* 2017, 1-6. Doi: 10.5004/dwt.2017.0704. IF 2017: 1.497. Citations: 11 (Source: Google Scholar).
34. **L. Chronopoulou**, Y. Toumia, B. Cerroni, A. Gentili, G. Paradossi, C. Palocci. Biosynthesis and characterization of a novel Fmoc-tetrapeptide based hydrogel for biotechnological applications. *Colloids and surfaces A: Physicochemical and Engineering Aspects* 2017, 532, 535-540. Doi: 10.1016/j.colsurfa.2017.04.003. IF 2017: 2.982. Citations: 12 (Source: Scopus).
 35. **L. Chronopoulou**, Y. Toumia, B. Cerroni, D. Pandolfi, G. Paradossi, C. Palocci. Biofabrication of genipin-crosslinked peptide hydrogels and their use in the controlled delivery of Naproxen. *New Biotechnology* 2017, 37, 138-143. Doi: 10.1016/j.nbt.2016.04.006. IF 2017: 4.000. Citations: 29 (Source: Google Scholar).
 36. S. Cerbelli, A. Borgogna, M.A. Murmura, M.C. Annesini, C. Palocci, M. Bramosanti, **L. Chronopoulou**. A Tunable Microfluidic Device to Investigate the Influence of Fluid-Dynamics on Polymer Nanoprecipitation. *Chemical Engineering Transactions* 2017, 57, 853-858. Doi: 10.3303/CET1757143. IF 2017: 0.893. Citations: 5 (Source: Scopus).
 37. **L. Chronopoulou**, C. Palocci, F. Valentino, I. Pettiti, S. Waclawek, M. Černík, M. Petrangeli Papini. Stabilization of iron (micro)particles with polyhydroxybutyrate for *in situ* remediation applications. *Applied Sciences* 2016, 6, 417-425. Doi: 10.3390/app6120417. IF 2016: 1.95. Citations: 16 (Source: Google Scholar).
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 39. **L. Chronopoulou**, G. Nocca, M. Castagnola, G. Paludetti, G. Ortaggi, F. Sciubba, M. Bevilacqua, A. Lupi, G. Gambarini, C. Palocci. Chitosan based nanoparticles functionalized with peptidomimetic derivatives for oral drug delivery. *New Biotechnology* 2016, 33, 23-31. Doi: 10.1016/j.nbt.2015.07.005. IF 2016: 4.385. Citations: 50 (Source: Google Scholar).
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 43. N. Cifani, **L. Chronopoulou**, B. Pompili, A. Di Martino, F. Bordini, S. Sennato, E.G. Di Domenico, C. Palocci, F. Ascenzioni. Improved stability and efficacy of chitosan/pDNA complexes for gene delivery. *Biotechnology Letters* 2015, 37, 557-565. Doi: 10.1007/s10529-014-1727-7. IF 2015: 1.771. Citations: 29 (Source: Google Scholar).

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47. F. Amaduzzi, F. Bomboi, A. Bonincontro, F. Bordini, S. Casciardi, **L. Chronopoulou**, M. Diociaiuti, F. Mura, C. Palocci, S. Sennato. Chitosan-DNA complexes: charge inversion and DNA condensation. *Colloids and surfaces B: Biointerfaces* 2014, 114, 1-10. Doi: 10.1016/j.colsurfb.2013.09.029. IF 2014: 4.763. Citations: 67 (Source: Google Scholar).
48. A. Valletta, **L. Chronopoulou**, C. Palocci, B. Baldan, L. Donati, G. Pasqua. Poly(lactic-co-glycolic) acid nanoparticle uptake by *Vitis vinifera* L. cells and tissues and by grapevine-pathogenic fungi. *Journal of Nanoparticle Research* 2014, 16, 2744-2758. Doi: 10.1007/s11051-014-2744-0. IF 2014: 2.283. Citations: 58 (Source: Google Scholar).
49. **L. Chronopoulou**, A. Agatone, C. Palocci. Supercritical CO₂ extraction of oleanolic acid from grape pomace. *International Journal of Food Science and Technology* 2013, 48, 1854-1860. Doi: 10.1111/ijfs.12161. IF 2013: 1.637. Citations: 9 (Source: Google Scholar).
50. **L. Chronopoulou**, M. Massimi, M.F. Giardi, C. Cametti, L. Conti Devirgiliis, M. Dentini, C. Palocci. Chitosan-coated PLGA nanoparticles: a sustained drug release strategy for cell cultures. *Colloids and surfaces B: biointerfaces* 2013, 103, 310-317. Doi: 10.1016/j.colsurfb.2012.10.063. IF 2013: 4.734. Citations: 177 (Source: Google Scholar).
51. **L. Chronopoulou**, A. Cutonilli, C. Cametti, M. Dentini, C. Palocci. PLGA-based nanoparticles: effect of chitosan in the aggregate stabilization. A dielectric relaxation spectroscopy study. *Colloids and surfaces B: biointerfaces* 2012, 97, 117-123. Doi: 10.1016/j.colsurfb.2012.04.016. IF 2012: 4.201. Citations: 25 (Source: Google Scholar).
52. **L. Chronopoulou**, A. R. Togna, G. Guarguaglini, G. Masci, F. Giammaruco, G. I. Togna, C. Palocci. Self-assembling peptide hydrogels promote microglial cells proliferation and NGF production. *Soft Matter* 2012, 8, 5784-5790. Doi: 10.1039/C2SM25528F. IF 2012: 4.183. Citations: 37 (Source: Google Scholar).
53. Fratoddi, I. Venditti, C. Cametti, C. Palocci, **L. Chronopoulou**, M. Marino, F. Acconcia, M.V. Russo. Functional polymeric nanoparticles for dexamethasone loading and release. *Colloids and surfaces B: biointerfaces* 2012, 93, 59-66. Doi: 10.1016/j.colsurfb.2011.12.008. IF 2012: 4.201. Citations: 58 (Source: Google Scholar).
54. G. Kamel, F. Bordini, **L. Chronopoulou**, S. Lupi, C. Palocci, S. Sennato, P.V. Verdes. Adsorption of *Candida rugosa* lipase at water-polymer interface: The case of poly(DL)lactide. *Surface Science* 2011, 605, 2017-2024. Doi: 10.1016/j.susc.2011.07.021. IF 2011: 2.142. Citations: 12 (Source: Google Scholar).
55. **L. Chronopoulou**, G. Kamel, C. Sparago, F. Bordini, S. Lupi, M. Diociaiuti, C. Palocci. Structure-activity relationships of *Candida rugosa* lipase immobilized on polylactic acid nanoparticles. *Soft*

- Matter 2011, 7, 2653–2662. Doi: 10.1039/C0SM00712A. IF 2011: 4.703. Citations: 82 (Source: Google Scholar).
56. **L. Chronopoulou**, S. Lorenzoni, G. Masci, M. Dentini, A. R. Togna, G. I. Togna, F. Bordi, C. Palocci. Lipase-supported synthesis of peptidic hydrogels. *Soft Matter* 2010, 6, 2525-2532. Doi: 10.1039/C001658F. IF 2010: 4.657. Citations: 76 (Source: Google Scholar).
 57. **L. Chronopoulou**, I. Fratoddi, C. Palocci, I. Venditti, M.V. Russo. Osmosis Based Method Drives the Self-Assembly of Polymeric Chains into Micro- and Nanostructures. *Langmuir* 2009, 25, 11940-46. Doi: 10.1021/la9016382. IF 2009: 4.075. Citations: 106 (Source: Google Scholar).
 58. C. Palocci, M. Falconi, **L. Chronopoulou**, E. Cernia. Lipase-catalyzed regioselective acylation of tritylglycosides in supercritical carbon dioxide. *Journal of Supercritical Fluids* 2008, 45, 88-93. Doi: 10.1016/j.supflu.2007.11.009. IF 2008: 2.584. Citations: 55 (Source: Google Scholar).
 59. C. Palocci, **L. Chronopoulou**, I. Venditti, E. Cernia, M. Diociaiuti, I. Fratoddi, M.V. Russo. Lipolytic enzymes with improved activity and selectivity upon adsorption on polymeric nanoparticles. *Biomacromolecules* 2007, 8, 3047-3053. Doi: 10.1021/bm070374l. IF 2007: 4.443. Citations: 84 (Source: Google Scholar).

X_B Book Chapters

1. M. Majone, **L. Chronopoulou**, L. Lorini, A. Martinelli, C. Palocci, S. Rossetti, F. Valentino, M. Villano. PHA copolymers from microbial mixed cultures: Synthesis, extraction and related properties. *Current Advances in Biopolymer Processing and Characterization*, Nova Science Publishers, 2017. Editor: M. Koller. ISBN: 978-153612711-9;978-153612710-2. Citations: 13 (Source: Google Scholar).
2. C. Palocci, **L. Chronopoulou**. Supercritical Fluid Extraction of Pharmaceutic Compounds from Waste Materials Derived from Vinification Processes. *Fruit and Pomace Extracts: Biological Activity, Potential Applications and Beneficial Health Effects*, Nova Publishers, 2015. Editor: J.P. Owen. ISBN: 9781634825108. Citations: 2 (Source: Google Scholar).
3. C. Palocci, **L. Chronopoulou**. Biotechnological routes to synthesize peptide based hydrogels in aqueous medium. *Green Chemistry*, Nova Publishers, 2011. Editor: R. Luque. ISBN: 9781613248775. Citations: 1 (Source: Scopus).
4. C. Palocci, **L. Chronopoulou**. Hybrid systems biomolecule-polymeric nanoparticle: synthesis, properties and biotechnological applications. *Advances in macromolecules*, Springer, 2010. Editor: M.V. Russo. ISBN: 978-90-481-3191-4. Citations: 2 (Source: Scopus).

X_C Patents

1. C. Palocci, **L. Chronopoulou**, F. Valentino, L. Lorini. Metodo per il recupero e la purificazione di PHA da colture microbiche miste. Patent submitted by Sapienza University of Rome on 15/07/2021 to the Italian Patent and Trademark Office (application n. 102021000018761).

Part XII– Selected Conference Participations

1. International Conference on Polymer Gels and Networks PNG 2022, Rome (I) 12-16/06/2022
L. Chronopoulou, R. Zanoni, A. Muttini, M. Papi, W. Lattanzi, O. Parolini, C. Palocci.
Injectable peptidic hydrogel composites for drug delivery and tissue regeneration applications. Oral-presenting author

2. 8° Convegno Nazionale del Forum On Regenerative Methods, Online 26-27/05/2022
L. Chronopoulou, R. Binaymotlagh, S. Cerra, E. Gino Di Domenico, I. Fratoddi, C. Palocci.
 Biosintesi di idrogeli peptidici compositi iniettabili per applicazioni biomediche. Oral-presenting author

3. 35th Conference of the European Colloid and Interface Society, ECIS, Athens (GR) 5-10/09/2021
L. Chronopoulou, F. Portoghesi, E. Brasili, G. De Angelis, A. Orekhova, G. Simonetti, G. Pasqua, C. Palocci. Microfluidic-assisted nanoprecipitation of polymeric nanoparticles for the delivery of bioactive compounds in plant systems. Oral-presenting author

3. Nanotexnology 2021, Thessaloniki (GR) 3-10/07/2021
 C. Palocci, **L. Chronopoulou**, N. Felli , B. Arasi, F. Felicetti. Surface conjugated CS based nanoparticles for targeting miRNA towards human melanoma cells. Oral

4. Applied Nanotechnology and Nanoscience International Conference 2021, Online 24-26/03/2021
L. Chronopoulou, F. Portoghesi, E. Brasili, G. De Angelis, A. Orekhova, G. Simonetti, G. Pasqua, C. Palocci. Microfluidic synthesis of PLGA nanocarriers for the controlled delivery of bioactive compounds in plants of agronomic interest. Oral-presenting author

5. 7° Convegno Nazionale del Forum On Regenerative Methods, Online 20-21/05/2021
L. Chronopoulou, A. Di Nitto, R. Zanoni, A. Muttini, M. Papi, W. Lattanzi, O. Parolini, C. Palocci. Idrogeli peptidici compositi iniettabili per applicazioni nella rigenerazione del tessuto osteoarticolare. Oral-presenting author

6. Nanotexnology 2019, Thessaloniki (GR) 2-5/07/2019
L. Chronopoulou, A. Di Nitto, A. Valletta, L. Donati, E. Brasili, G. Pasqua, C. Palocci. Microfluidic synthesis of polymeric nanoparticles for innovative applications in plant drug delivery. Oral-presenting author

7. Convegno Giovani Ricercatori, Roma (I) 25-26/06/2019
L. Chronopoulou, M.A. D'Aurelio, L. Lorini, F. Valentino, M. Villano, M. Majone, C. Palocci. Innovative green chemistry approaches to recover and purify biopolymers from bacterial complex biomass. Poster

8. Nanomedicine Rome 2018, Rome (I) 18-20/06/2018
L. Chronopoulou, A. DI Nitto, A. Amalfitano, G. Nocca, A. Arcovito, I. Silvestri, F. Domenici, S. Giantulli, F. Brasili, C. Palocci. Innovative nanofabrication methodologies for the preparation of drug delivery systems. Oral-presenting author

9. Composite Materials Congress, Stockholm (S) 3-6/06/2018
L. Chronopoulou, A. Di Nitto, A. Amalfitano, G. Nocca, A. Arcovito, I. Cacciotti, R. Zanoni, C. Palocci. Injectable hydrogel composites for biotechnological applications. Invited oral-presenting author

10. Italian Forum on Industrial Biotechnology and Bioeconomy, Rome (I) 5-6/10/2017
L. Chronopoulou, M. Majone, F. Valentino, L. Lorini, F. Pagnanelli, F. di Caprio, C. Palocci. Supercritical fluid extraction of biomolecules and polymers from plant and microbial cells. Poster

11. 28th Annual Conference of the European Society for Biomaterials, Athens (GR) 4-8/09/2017
L. Chronopoulou, A. Amalfitano, G. Nocca, M. Valente, J. Tirillò, C. Palocci. Lipase-catalyzed synthesis of injectable peptide hydrogels for biotechnological applications. Oral

12. VII Workshop AICing (Associazione Italiana di Chimica per Ingegneria), Milano (I) 12-13/06/2017
L. Chronopoulou, A. Amalfitano, G. Nocca, M. Valente, C. Palocci. Biosynthesis of injectable peptide hydrogels for biotechnological applications. Poster

13. Nanomedicine Viterbo 2016, Viterbo (I) 21-23/09/2016
A. Amalfitano, A. Arcovito, C. Callà, **L. Chronopoulou**, M. Cordaro, M. Cantiani, G. Nocca, C. Palocci. Evaluation of the antiproliferative effect of 18 β -Glycyrrhetic acid-loaded nanoparticles for treatment of drug-induced gingival overgrowth. Poster
14. Nanomedicine Viterbo 2016, Viterbo (I) 21-23/09/2016
L. Chronopoulou, G. Nocca, A. Amalfitano, A. Arcovito, S. Sennato, F. Bordi, I. Cacciotti, C. Palocci. Biosynthesis of injectable gelling peptides for applications in bone tissue regeneration. Oral-presenting author
15. 30th Conference of the European Colloid and Interface Society, ECIS, Rome (I) 4-9/09/2016
M. Bramosanti, **L. Chronopoulou**, F. Grillo, A. Valletta, L. Donati, G. Pasqua, C. Palocci. Ribavirin entrapment into PLGA NPs by a novel microfluidic approach. Poster
16. 30th Conference of the European Colloid and Interface Society, ECIS, Rome (I) 4-9/09/2016
L. Chronopoulou, S. Sennato, G. Nocca, A. Amalfitano, Y. Toumia, B. Cerroni, A. Arcovito, I. Cacciotti, F. Bordi, G. Paradossi, C. Palocci. Injectable peptidic hydrogels for bone tissue repair and regeneration. Oral-presenting author
17. 3° Convegno Nazionale del Forum On Regenerative Medicine, Rome (I) 7-8/04/2016
L. Chronopoulou, A. Amalfitano, G. Nocca, S. Sennato, F. Bordi, A. Arcovito, Y. Toumia, G. Paradossi, C. Palocci. Biosintesi di idrogeli peptidici per applicazioni di tissue engineering e medicina rigenerativa. Oral-presenting author
18. Biosensors 2016, Gothenburg (S) 25-27/05/2016
G. Fusco, A. D'Annibale, C. Tortolini, R. Antiochia, G. Favero, **L. Chronopoulou**, C. Palocci, F. Mazzei. A new immobilization procedure based on gelling oligopeptides for biosensors development. Poster
19. 8th European Symposium on Biopolymers, Rome (I) 15-18/09/2015
S. Sennato, **L. Chronopoulou**, F. Rinaldi, M.G. Belardinelli, F. Domenici, C. Marianecchi, A. Musarò, C. Palocci, F. Bordi. Chitosan-coated drug delivery vectors for skeletal muscle targeting. Poster
20. 8th European Symposium on Biopolymers, Rome (I) 15-18/09/2015
M. Bramosanti, **L. Chronopoulou**, C. Palocci. A modular microfluidic platform for the synthesis of biopolymeric nanoparticles entrapping organic actives. Poster
21. 8th European Symposium on Biopolymers, Rome (I) 15-18/09/2015
L. Chronopoulou, S. Sennato, F. Bordi, G. Nocca, C. Palocci. Biosynthesis, characterization and biomedical applications of peptide-based hydrogels. Oral-presenting author
22. 2° Convegno Nazionale del Forum On Regenerative Medicine, Rome (I) 19-20/03/2015
L. Chronopoulou, G. Nocca, A. Amalfitano, A. Arcovito, C. Palocci. Nanoparticelle biopolimeriche caricate con desametasone promuovono il differenziamento dei fibroblasti gengivali umani. Oral-presenting author
23. ESGB meeting Biofilm-based healthcare-associated infections: from microbiology to clinics, Rome (I) 9-10/10/2014
L. Chronopoulou, E. di Domenico, N. Cifani, P. del Porto, F. Ascenzioni, C. Palocci. Tobramycin-loaded biopolymeric nanoparticles for bacterial biofilms management. Oral-presenting author
24. IADR/PER Congress 2014, Dubrovnik (HR) 10-13/09/2014
C. Palocci, G. Nocca, G. Spagnuolo, S. Rengo, C. Callà, **L. Chronopoulou**. PLGA nanoparticles: A sustained drug release strategy for cell cultures. Poster

25. VI Convegno Giovani Chimici, Rome (I) 17-18/06/2014
L. Chronopoulou, C. Sparago, C. Palocci. Progettazione e realizzazione di un innovativo reattore microfluidico capillare per la sintesi di nanoparticelle polimeriche. Poster
26. 15th European Conference on Composite Materials, Venice (I) 24-28/06/2012
L. Chronopoulou, G. Kamel, F. Bordi, S. Lupi, C. Palocci. Enzyme immobilization on polymeric nanoparticles as a tool to improve biocatalytic performance. Oral-presenting author
27. V Convegno Giovani Chimici, Rome (I) 12-13/06/2012
L. Chronopoulou, C. Palocci, A. R. Togna. Lipase-supported synthesis of peptidic hydrogels. Oral-presenting author
28. 3rd International Congress on Biohydrogels, Florence (I) 8-12/11/2011
L. Chronopoulou, C. Cametti, A. Barbetta, M. Massimi, M. F. Giardi, L. Conti Devirgiliis, M. Dentini, C. Palocci. Core-shell biopolymeric nanoparticles for DXM encapsulation and its in vitro cell uptake. Poster
29. 3rd International Congress on Biohydrogels, Florence (I) 8-12/11/2011
F. Giammaruco, **L. Chronopoulou**, G. Masci, M. P. Bossa, A. R. Togna, C. Palocci. Biosynthesis of Fmoc peptides for mammalian microglial cells proliferation and activation. Oral
30. 10th International Symposium on Biocatalysis Biotrans 2011, Giardini Naxos (I) 2-6/10/2011
L. Chronopoulou, G. Kamel, F. Bordi, M. Diociaiuti, S. Lupi, C. Palocci. Structure-performance relationships of lipolytic enzymes immobilized on polymeric nanoparticles. Poster
31. X National Conference on Nanophase Materials, Bologna (I) 6-8/09/2011
A. Di Martino, **L. Chronopoulou**, F. Ascenzioni, F. Bordi, C. Palocci. Synthesis and physico-chemical characterization of nanocomplexes chitosan /DNA for gene delivery applications. Oral
32. NANO 2010 X International Conference on Nanostructured Materials, Rome (I) 13-17/09/2010
D. Senigallia, **L. Chronopoulou**, A. Barbetta, M. Massimi, M. De Colli, L. Conti Devirgiliis, M. Dentini, C. Palocci. Encapsulation of dexamethasone into biodegradable polymeric nanoparticles for in vitro cell uptake. Poster
33. From Solid State to Biophysics V, Cavtat (HR) 12-19/06/2010
L. Chronopoulou, G. Kamel, F. Bordi, M. Diociaiuti, S. Lupi, C. Palocci. Structure-performance relationships of lipolytic enzymes immobilized on polymeric nanoparticles. Oral-presenting author
34. 10 anni di microscopia a scansione al dipartimento di chimica, Rome (I) 19/01/2010
C. Palocci, **L. Chronopoulou**, G. Masci, M. Dentini. La microscopia elettronica a scansione nella caratterizzazione di bioidrogeli a base peptidica. Oral-presenting author
35. 2nd International Congress on Biohydrogels, Viareggio (I) 10-15/11/2009
C. Palocci, **L. Chronopoulou**, G. Masci, M. Dentini, A. R. Togna. Lipase-catalyzed synthesis in aqueous medium of self-assembling peptides for biomedical applications. Poster
36. XXIII Congresso Nazionale della Società Chimica Italiana, Sorrento (I) 5-10/07/2009
I. Venditti, **L. Chronopoulou**, C. Palocci, I. Fratoddi, M.V. Russo. Polymeric nanobeads for bioactive molecules encapsulation. Poster
37. X National Biotechnology Congress, Perugia (I) 17-19/09/2008
C. Palocci, **L. Chronopoulou**, A. Masotti, F. Bordi. A novel patented method to prepare polymeric micro and nanoparticles for biomedical applications. Poster
38. III Convegno Giovani Chimici, Rome (I) 18-19/06/2008

L. Chronopoulou, C. Palocci, I. Fratoddi, I. Venditti, M. V. Russo. Carrier biopolimerici nanostrutturati per l'immobilizzazione di enzimi lipolitici. Poster

39. VI Convegno INSTM, Perugia (I) 12-15/04/2007

I. Venditti, R. Vitaliano, F. Vitale, C. Palocci, I. Fratoddi, C. Battocchio, **L. Chronopoulou**, L. Tapfer, M.V. Russo. Nanostructured Polymers for Optoelectronics and Biotechnological applications. Poster

40. CNB9 IX Congresso Nazionale Biotecnologie, Torino (I) 7-9/09/06

C. Palocci, **L. Chronopoulou**, I. Venditti, E. Cernia, M. V. Russo. Immobilization of lipolytic enzymes onto polymeric nanoparticles. Poster

41. XVI Congresso nazionale di Chimica Industriale: Scienze e Tecnologie Chimiche per uno Sviluppo Sostenibile, Verbania Pallanza (I) 14

C. Palocci, M.V. Russo, **L. Chronopoulou**, I. Venditti, R. D'Amato, C. Belsito, E. Cernia, C. Coluzza, G. Piantanida, Nanoparticles-enzyme hybrid systems: novel catalyst for application in bioconversion reactions. Oral

42. Workshop Functional & Nanostructured Materials from Chemistry + Nanostructured Polymers from Processing, Dresden (D) 23 and 28/04/2005

M.V. Russo, C. Palocci, **L. Chronopoulou**, C. Belsito, I. Venditti, R. D'Amato, E. Cernia. The improvement of lipolytic enzyme activity achieved by the adsorption on polymethylmethacrylate and polystyrene nanospheres. Poster

Part XIII– Outreach activities (Terza Missione)

Year	Event	Activity
2023	Maggio Museale-Notte dei Laboratori-Sapienza University of Rome	Welcoming the public and explaining the research activities of the group
2023	PNRR project Next Generation EU	University orientation activities in several high schools in the Lazio region
2023	European Researchers Night-Settimana per le scuole-Sapienza University of Rome	Seminar for high school students entitled “Materiali avanzati e sostenibili per il packaging alimentare”
2024	Porte Aperte alla Sapienza-Sapienza University of Rome	Welcoming high school students and guiding laboratory visits
2024	Istituto di Istruzione Superiore Giorgi Woolf, Rome	Seminar for high school students entitled “Plastica e prodotti monouso: ne abbiamo veramente bisogno?”
2024	Christmas Seminars for high school students-Sapienza University of Rome-Chemistry Department	Seminar for high school students entitled “Plastica e prodotti monouso: ne abbiamo veramente bisogno?”