CURRICULUM VITAE
EUROPEAN FORMAT

PERSONAL INFORMATION

Name	**PAGANO LUCA**
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Nationality	Italian
Place and Date of birth	[redacted]

WORK EXPERIENCE

CURRENT POSITION
December 2017 - December 2020: Researcher position (RTD-a). Dept. of Chemistry, Life Sciences and Environmental Sustainability, University of Parma, Parma, IT.

January 2017 - November 2017: research fellowship "Valorizzazione del biochar a scopi ambientali, agronimici e agroaimentari". Dept. of Chemistry, Life Sciences and Environmental Sustainability, University of Parma, Parma, IT.

February 2016 - November 2016: post-doctoral position included into the project "Bio-revaluation of the Chemical District of Mantova by planning non-food biomass supply and it upgrading to bioproducts" (BIOMAN). Italbiotec Consortium, Milano, IT.

July 2015 - July 2016: Department assistant. Stockbridge Agricultural School (group leader: Prof. O. Parkash Dhankher), University of Massachusetts, Amherst, MA, USA.

March 2015 - December 2016: post-doctoral collaboration. Analytical Chemistry Department (director: Dr. Jason C. White) of the Connecticut Agricultural Experiment Station (CAES), New Haven, CT, USA.

November 2014 - November 2015: research fellowship "Analisi sulla sicurezza per la salute e per l'ambiente determinata dalle interazioni tra nanoparticelle, nanomateriali e piante di interesse agroalimentare". Dept. of Life Sciences, University of Parma, Parma, IT.

November 2013 - November 2014: Assitant to "Biotecnologie applicate" course (professorship: Dr. Marta Marmiroli) of Biotechnology BS curriculum (coordinator: Prof. Nelson Marmiroli), University of Parma, Parma, IT.

March 2013 - May 2013: collaboration related to *S. cerevieae* genotoxicity related to CdS QDs exposure. YMG research group (group leader: Prof. Carlo V. Bruschi), ICGEB, Padriciano (TS), IT.

September 2010 - October 2014: scholarship "Genomica, trascrittomica e fisiologia dell'interazione pianta-nanoparticelle di CdS in pioppo". Dept. of Environmental Sciences, University of Parma, Parma, IT.

EDUCATION AND TRAINING

October 2014 - October 2017: "Cultore della Materia" title in BIO/13 sector, University of Parma, Parma, IT.

July 2-13 2012. Participation to MISTRAL Montpellier International School on ion and water transport in plants", SupAgro/INRA campus, Montpellier, FRA.

January 2011 - March 2014: Ph.D fellowship in Biotechnology. Project title: Biotechnology of nanoparticle interactions with plants and yeasts (available on DSpace UNIPR website, http://hdl.handle.net/1889/2492). Supervisor: Prof. Nelson Marmiroli. Dept. of Environmental Sciences, University of Parma, Parma, IT.

May 2009 - April 2010: Master thesis: Effetti cellulari, molecolari di nano particelle metalliche: il caso dei nanodot a base di cadmio solfuro (Cellular and molecular effects of nanoparticles: the case of cadmium sulfide based nanodots). Tutor: Prof. Nelson Marmiroli. Dept. of Environmental Sciences, University of Parma, Parma, IT.

October 2007 - April 2010: Master Degree in Industrial Biotechnology, mark 110/110 with honors. University of Parma, Parma, IT.

October 2004 - July 2007: Bachelor Degree in Biotechnology, mark 104/110. University of Parma, Parma, IT.

June 2004 - High School certificate, mark 92/100. ITIS Institute G. Capellini, La Spezia, IT.

PERSONAL SKILLS AND COMPETENCES

Mother tongue(s)	**ITALIAN**
Other language(s)	**ENGLISH**
• Reading	Excellent
• Writing	Excellent
• Speaking	Excellent

Social skills and competences

Acquisition of excellent skills of relationship both in professional and personal area.

Acquisition of excellent skills in scientific communication through experiences as speaker in national and international conferences, awarded during the 1st "PARMA" NANO-DAY.

Organizational skills and competences

Acquisition of excellent skills in managing area both in human resource and research project during the work experiences at the University of Parma (Parma, IT), the Connecticut Agricultural Experiment Station (New Haven, CT, USA) and University of Massachusetts (Amherst, MA, USA).

Acquisition of excellent skills in managing bachelor and master degree students, as well as PhD students during the work experiences at the University of Parma (Parma, IT).

Participation and management of practical laboratory trainings of "Biotecnologie Applicate" course (professorship: Dr. Marta Marmiroli) and "Tecnologie Ricombinanti" course (professorship: Prof. Nelson Marmiroli) of Biotechnology BS curriculum, University of Parma, Parma, IT.

Participation to the organization of three international conferences: 7th International Conference on Phytotechnologies (Parma, September 26-29, 2010); the Annual Conference of COST Action FA0905 "What's for lunch? Nutrients and minerals in every day food" (Venice, November 24-25, 2011) and the 3rd "Parma" NANO-DAY (Parma, July 12-14, 2017).

Technical skills and competence

Acquisition of competences in the main techniques of Genetics, Molecular Biology, Biochemistry, Bioinformatics and Analytical Chemistry.

Acquisition of specific competences of molecular biology: DNA and RNA extractions, end point and Real Time PCR amplification, gene cloning, sequencing, blotting.

Acquisition of specific competences on high-throughput data managing for microarray (Affymetrix microarray software) and RNAseq.

Acquisition of excellent knowledge related to statistics and bioinformatics tools for data analysis data mining and Systems biology (R, Panther, KEGG, ThaleMine, GeneMania).

Acquisition of excellent knowledge on management of *Arabidopsis thaliana* (L.) Heyhn and *Saccharomyces cerevisiae* eukaryotic model organisms and related mutant libraries.

Acquisition of specific skills related to wide used crop species management and impact on trophic chains: *Solanum lycopersycum* L., *Cucurbita pepo* L., *Lactuca sativa* L.

Acquisition specific competences on nanoparticles and engineered nanomaterials (ENMs) management.

Acquisition specific competences in Inductively Coupled Plasma Mass Spectrometry (ICP-MS) sample preparation and analysis.

Acquisition specific competences in Scanning Election Microscope (SEM) and Transmission Electron Microscope (TEM) sample preparation and analysis.

Acquisition of excellent knowledge about Windows and Mac operative systems and global networks.
Acquisition of excellent knowledge related to Microsoft Office and Adobe Photoshop software.

European Driving License B

RESEARCH ACTIVITIES

ENMs risk assessment, ecotoxicological impact and trophic transfer.

Physiological and molecular response of plant model organism *A. thaliana* and crop species exposed to ENMs.

Physiological and molecular response of eukaryotic model system *S. cerevisiae* exposed to ENMs and Systems Biology.

Effects of biochar and metal or ENMs on crop plant.

REVIEWER ACTIVITIES

From January 2017: Reviewer for the Environmental Pollution (Elsevier).

From June 2016: Reviewer for the Environmental Science & Technology (ACS Publications) and Plant Physiology and Biochemistry (Elsevier).

From January 2016: Reviewer for the International Journal of Molecular Science (MDPI Open Access Publishing).

From January 2015: Reviewer for Environmental Science and Pollution Research (Springer), International Journal of Phytoremediation (Taylor & Francis).

EDUCATIONAL ACTIVITIES

Academic Year 2018/2019: Professor of "Genetic engineering in Food production" course of Food Systems: Management, Sustainability and Technologies BS curriculum, University of Parma, Parma, IT.

Lecturer during the "Food Production and Genetic resources" course (professorship: Prof. Nelson Marmiroli) of Food Systems: Management, Sustainability and Technologies BS curriculum, University of Parma, Parma, IT.

Academic Year 2017/2018: Professor of "Organismi transgenici per la ricerca e le applicazioni" course (professorship with Prof. Elena Maestri) of Biotechnology BS curriculum, University of Parma, Parma, IT.

Lecturer during the "Food Production and Genetic resources" course (professorship: Prof. Nelson Marmiroli) of Food Systems: Management, Sustainability and Technologies BS curriculum, University of Parma, Parma, IT.

May 2017: Lecturer during the "Tecnologie Ricombinanti" course (professorship: Prof. Nelson Marmiroli) of Biotechnology BS curriculum, University of Parma, Parma, IT.

April 2017: Practical laboratory trainer of "Tecnologie Ricombinanti" course (professorship: Prof. Nelson Marmiroli) of Biotechnology BS curriculum, University of Parma, Parma, IT.

2017: Seminar activities in "Systems Biology - Biologia dei Sistemi" course (professorship: Prof. Nelson Marmiroli) of Biotechnology BS curriculum, University of Parma, Parma, IT.

March 2016: Seminar activities for "Biotechnology" PhD course (coordinator: Prof. Nelson Marmiroli), University of Parma, Parma, IT.

October 2015: Seminar activities during the "Seminar Series 2015-2016" of the Connecticut Agricultural Experiment Station (New Haven, CT, USA).

September 2014: Assistant during the admission test to Biotechnology BS curriculum, University of Parma, Parma.

2014: Seminar activities in "Systems Biology - Biologia dei Sistemi" course (professorship: Prof. Nelson Marmiroli) of Biotechnology BS curriculum, University of Parma, Parma, IT.

2013-2014: Assistant lecturer during the "Biotecnologie Applicate" course (professorship: Dr. Marta Marmiroli) of Biotechnology BS curriculum, University of Parma, Parma, IT.

September 2011: Seminar Activities during the training of the visiting professor Antonio Di Mauro (São Paulo State University-UNESP, Brazil).

2011 and 2013: Seminar activities during trainings of projects TEMPUS.

From 2010-2014: Practical laboratory trainer of "Biotecnologie Applicate" course (professorship: Dr. Marta Marmiroli) and "Tecnologie Ricombinanti" course (professorship: Prof. Nelson Marmiroli) of Biotechnology BS curriculum, University of Parma, Parma, IT.

NATIONAL AND INTERNATIONAL PROJECTS PARTICIPATION

2016: Project "Bio-revaluation of the Chemical District of Mantova by planning non-food biomass supply and it upgrading to bioproducts" (BIOMAN).

2013-2015: Projects TEMPUS CE EACEA: 2010-13 "EU Based Course in Foodstuff Expertise & Quality Control" (coordinator: Universitaet Weihenstephan); TEMPUS CE EACEA: 2009-2012 "Advanced M.Sc. Program in Ecology for Volga-Caspian Basin" (AMEV) (coordinator: Universitaet Stuttgart).

2011: Preparation, validation and commercialisation of prototype toxigenomics chip" (TOXICHIP).

2010: PRIN 2008: "Geni, prodotti genici, funzioni decontaminanti in Salicaceae per metalli e nanoparticelle."

MEMBERSHIPS

From 2018 - Member of the Sustainable Nanotechnology Organization (SNO), Washington, DC, USA.

From 2018 - Member of the Associazione Italiana Biologia e Genetica Generale e Molecolare (AIBG), Modena, IT.

PUBLICATIONS

SCOPUS AUTHOR ID: 36465270500
total documents: 16
total citations: 208
h-index: 8

Pagano L, Marmiroli M, Maestri E, White JC, Marmiroli N. Quantum dots exposure in plants: Minimizing molecular response. *Current Opinion on Environmental Science and Health*. doi: 10.1016/j.coesh.2018.09.001.

Pagano L, Maestri E, Caldara M, White JC, Marmiroli N, Marmiroli M. Engineered nanomaterial activity at the organelle level: impacts on the chloroplasts and mitochondria. *ACS Sustainable Chem. Eng*. 2018. doi: 10.1021/acssuschemeng.8b02046.

De La Torre-Roche R, Pagano L, Majumdar S, Servin A, Zuverza-Mena N, Marmiroli N, Parkash Dhanker O, Eitzer BD, Ma C, White JC. Co-exposure of Imidacloprid and Nanoparticle Ag or CeO2 to Cucurbita pepo (Zucchini): Contaminant Bioaccumulation and Translocation. *NanoImpact*. 2018. 11, 136-145. doi: 10.1016/j.impact.2018.07.001.

Elmer W, De la Torre-Roche R, Pagano L, Majumdar S, Zuverza-Mena N, Dimpka C, Gardea-Torresday J, White JC. Effect of metalloid and metallic oxide nanoparticles on Fusarium wilt of watermelon. *Plant Disease*. 2018. 102, 7, 1394-1401. doi: 10.1094/PDIS-10-17-1621-RE.

Ruotolo R, Maestri E, Pagano L, Marmiroli M, White JC, Marmiroli N. Plant response to metal-containing engineered nanomaterials: an omics-based perspective. *Environ Sci Technol*. 2018, 52(5),2451-2467. doi: 10.1021/acs.est.7b04121.

Servin AD, Castillo HM, Hernandez-Viezcas JA, De Nolf W, De la Torre-Roche R, Pagano L, Pignatello J, Uchimiya M, Gardea-Torresday J, White JC. Bioaccumulation of CeO2 nanoparticles by earthworms in biochar amended soil: A Synchrotron Microspectroscopy Study. *J. Agric. Food Chem*. 2018. 66 (26), 6609–6618. doi: 10.1021/acs.jafc.7b04612.

Pagano L, Pasquali F, Majumdar S, De La Torre-Roche R, Zuverza-Mena N, Villani M, Zappettini A, Marra RE, Isch SM, Marmiroli M, Maestri E, Parkash Dhankher O, White JC, Marmiroli N. Exposure of *Cucurbita pepo* to binary combinations of engineered nanomaterials: Physiological and molecular response. *ES Nano*. 2017. 4: 1579-1590. doi: 10.1039/C7EN00219J.

Servin AD, Pagano L, Castillo-Michel H, De la Torre-Roche R, Hawthorne J, Hernandez-Viezcas JA, Loredo R, Majumdar S, Gardea-Torresday J, Parkash Dhankher O, White JC. Weathering in soil increases nanoparticle CuO bioaccumulation within a terrestrial food chain. *Nanotoxicology*. 2017, 11, 98-111. doi: 10.1080/17435390.2016.1277274.

Pasquali F, Agrimonti C, Pagano L, Zappettini A, Villani M, Marmiroli M, White JC, Marmiroli N. Nucleo-mitochondrial interaction in yeast in response to CdS QDs exposure. *J Haz Mat.* 2016, 324 (B), 744-752. doi: 10.1016/j.jhazmat.2016.11.053.

Pagano L, Servin AD, De La Torre-Roche R, Majumdar S, Mukherjee A, Hawthorne J, Marmiroli M, Maestri E, Marra RE, Isch SM, Parkash Dhankher O, White JC, Marmiroli N. Molecular Response of Crop Plants to Engineered Nanomaterials. *Environ Sci Technol*. 2016, 50 (13), 7198–7207. doi: 10.1021/acs.est.6b01816.

Servin AD, De la Torre Roche R, Castillo HM, Pagano L, Hawthorne J, Musante C, Pignatello J, Uchimiya M, White JC. Exposure of agricultural crops to nanoparticle CeO_2 in biochar-amended soil. *Plant Physiol. Biochem*. 2016, 110:147-157. doi: 10.1016/j.plaphy.2016.06.003.

Mukherjee A, Majumdar S, Servin AD, Pagano L, Parkash Dhankher O, White JC. Carbon nanomaterials in agriculture: a critical review. *Front. Plant Sci.* 2016. doi: 10.3389/fpls.2016.00172.

Marmiroli M, Imperiale D, Pagano L, Villani M, Zappettini A, Marmiroli N. The proteomic response of Arabidopsis thaliana to cadmium sulfide quantum dots, and its correlation with the transcriptomic response. *Front. Plant Sci.* 2015. doi: 10.3389/fpls.2015.01104.

Marmiroli M,* Pagano L,* Pasquali F, Zappettini A, Tosato V, Bruschi C, Marmiroli N. A genome-wide nanotoxicology screen of *Saccharomyces cerevisiae* mutants reveals the basis for cadmium sulphide quantum dot tolerance and sensitivity. *Nanotoxicology.* 2016, 10(1):84-93. doi: 10.3109/17435390.2015.1019586.

Marmiroli M,* Pagano L,* Savo Sardaro ML, Villani M, Marmiroli N. Genome-Wide Approach in *Arabidopsis thaliana* to assess the toxicity of cadmium sulfide quantum dots. *Environ Sci Technol*. 2014. 20;48(10):5902-9.

Beesley L, Marmiroli M, Pagano L, Pigoni V, Fellet G, Fresno T, Vamerali T, Bandiera M, Marmiroli N. Biochar addition to an arsenic contaminated soil increases arsenc concentrations the pore water but reduces uptake to tomato plants (*Solanum lycopersicum* L.). *Sci Total Environ*. 2013, 1;454-455:598-603.

*, *authors contributed equally to the manuscript.*

PUBLISHED DATASET
(AVAILABLE ON NCBI GEO)

Pagano L, Marmiroli M, Savo Sardaro ML, Marmiroli N. A genome-wide approach in *Arabidopsis thaliana* to assess the toxicity of cadmium sulphide quantum dots. 2014. Accession Number: GSE53989.

CONFERENCE PROCEEDINGS
(CONTRIBUTION FORM, PRESENTING AUTHOR)

7th Sustainable Nanotechnology Organization Conference. November 8-11 2018, Alexandria, VA, USA.
Maintenance and expression of organelle information in plants exposed to engineered nanomaterials. (oral presentation)
Pagano L, Marmiroli M, Maestri E, White JC, Marmiroli N.

15th International Phytotechnologies Conference, October 1-5 2018, Novi Sad, SRB.
Engineered nanomaterial activity at the organelle level: impacts on the chloroplasts and mitochondria.
Pagano L, Maestri E, Caldara M, White JC, Marmiroli N, Marmiroli M (oral presentation)

Co-exposure of Imidacloprid and weathered or unweathered Ag nanoparticles to Cucurbita pepo (Zucchini): contaminant bioaccumulation and translocation. (oral presentation)
De la Torre-Roche R, McMahon C, Pagano L, Majumdar S, Eitzer BD, Zuverza-Mena N, Ma C, Servin AD, Marmiroli N, Dhankher OP, White JC.

NanoInnovation 2018, September 11-14 2018, Rome, ITA.
Possible applications of Engineered nanomaterials in agriculture: the issue of interaction. (oral presentation)
Marmiroli M, Pagano L, Maestri E, Marmiroli N, White JC.

1st PANAMERICANANO. November 27-30 2017, Guaruja, SP, BRA.
Effects of engineered nanoparticles on plants root diseases and crop health (oral presentation). De La Torre-Roche R, Plaza-Pérez C, Ma C, Pagano L, Majumdar S, Zuverza-Mena N, White JC, Elmer W.

Response of soybean plants to cadmium sulphide as a function of surface coating. (oral presentation). Majumdar S, Pagano L, Zuverza-Mena N, Ma C, Villani M, Zappettini A, Keller A, White JC.

6th Sustainable Nanotechnology Organization Conference. November 5-7 2017, Los Angeles, CA, USA.
Yeast as a model in toxicological studies on Engineered Nanomaterials (ENMs) (oral presentation). Marmiroli N, White JC, Srivastava V, Ruotolo R, Marmiroli M, Maestri E, Pagano L, Imperiale D, Pira G, Gallo V, Villani M, Zappettini A.

Higher plants response to metal-based nanoparticles: meta-analysis of data shows

transcriptomics and proteomics rearrangements (oral presentation). Marmiroli N, White JC, Marmiroli M, Maestri E, Pagano L, Imperiale D, Gallo V, Villani M, Zappettini A.

Role of surface coating on accumulation of cadmium sulfide quantum dots in soybean plants and associated stress mechanisms (oral presentation). Majumdar S, Zuverza-Mena N, Pagano L, Ma C, Villani M, Zappettini A, Keller A, White JC.

14th International Phytotechnologies Conference, September 25-29 2017, Montreal, CND.

Exposure of *Cucurbita pepo* to binary combinations of engineered nanomaterials: Physiological and molecular response (oral presentation). Pagano L, Pasquali F, Majumdar S, De La Torre-Roche R, Zuverza-Mena N, Villani M, Zappettini A, Marra RE, Isch SM, Marmiroli M, Maestri E, Parkash Dhankher O, White JC, Marmiroli N.

A systems biology approach to elucidate the response of plants to metal-based nanomaterials (oral presentation). Maestri E, Ruotolo R, Pagano L, Marmiroli M, White JC, Marmiroli N.

Surface coating as a determining factor for response of soybean plants to cadmium sulfide quantum dots (oral presentation). Majumdar S, Zuverza-Mena N, Pagano L, Ma C, Villani M, Zappettini A, Keller A, White JC.

The use of nanoparticles (NP) of plant micronutrients to enhance plant growth and suppress disease (oral presentation). Elmer W, De La Torre-Roche R, Zuverza-Mena N, Pagano L, Ma C, White JC.

Impact of Ag and CeO2 Nanoparticle Exposure on Imidacloprid Bioaccumulation by Cucurbita pepo (Zucchini) (poster). De La Torre-Roche R, Pagano L, Majumdar S, Servin A, Zuverza-Mena N, Marmiroli N, Parkash Dhanker O, Eitzer BD, Ma C, White JC.

14th ICOBTE Meeting, July 16-20 2017, Zurich, CHE.

Interactions of gold nanoparticles and the micronutrient silicon in a soil-grown legume at realistic exposure levels (oral presentation). Schwab F, Pagano L, Borschneck D, Levard C, Angeletti B, White JC, Rose J, Auffan M.

Nuclear-mitochondrial interactions in the toxicity mechanisms of metal-containing nanoparticles in different organisms (oral presentation). Marmiroli N, White JC, Marmiroli M, Ruotolo R, Imperiale D, Paesano L, Pagano L, Pasquali F, Maestri E.

3rd Parma NANODAY, July 12-14 2017, Parma, ITA.

Physiological and molecular response *Cucurbita pepo* exposed to ENM binary combinations (oral presentation). Pagano L, Pasquali F, Majumdar S, De La Torre-Roche R, Zuverza-Mena N, Villani M, Zappettini A, Marra RE, Isch SM, Marmiroli M, Maestri E, Parkash Dhankher O, White JC, Marmiroli N.

Nucleo-mitochondrial interaction of yeast in response to cadmium sulfide quantum dot exposure (poster). Pasquali F, Agrimonti C, Pagano L, Zappettini A, Villani M, Marmiroli M, White JC, Marmiroli N.

The proteomic response of *Arabidopsis thaliana* to cadmium sulfide Quantum Dots and its correlation with the transcriptomic response (poster). Imperiale D, Marmiroli M, Pagano L, Villani M, Zappettini A, Marmiroli N.

27th Annual SETAC Meeting, May 7-11 2017, Bruxelles, BEL.

Interactions of gold nanoparticles and the micronutrient silicon in a soil-grown legume at realistic exposure levels (oral presentation). Schwab F, Pagano L, Borschneck D, Levard C, Angeletti B, White JC, Rose J, Auffan M.

NanoImpact Conference, March 12-17 2017, Monte Verità, Ascona, CHE.

Nuclear-mitochondrial interactions in the toxicity mechanisms of metal-containing nanoparticles in different organisms (oral presentation). Marmiroli N, White JC,

Marmiroli M, Ruotolo R, Imperiale D, Paesano L, Pagano L, Pasquali F, Maestri E.

XVII National Congress AIBG, September 30 - October 1 2016, Cagliari, ITA.
Molecular Mechanisms Of Toxicity Of Metal-Containing Nanoparticles In Plants: An Omics Approach (oral presentation). Marmiroli N, Ruotolo R, Marmiroli M, Imperiale D, Pagano L, Pasquali F, Maestri E.

13th International Phytotechnologies Conference "Plant-Based Solutions For Environmental Problems: From Lab To Field", September 26-28 2016, Hangzhou City, Zhejiang Province, CHN.
Mitochondrial Disruption As A Molecular Mechanism Of Toxicity Of Metal-Containing Nanoparticles (oral presentation). Marmiroli N, Ruotolo R, Marmiroli M, Imperiale D, Paesano L, Pagano L, Pasquali F,
Pira G, Maestri E.

Joint Meeting of the APS-Caribbean-Division and the Latin-American-Phytopathological-Society and the Mexican-Society-of-Phytopathology, Jul 19-23 2016. Mexico City, MEX.
Nanoparticles of micronutrients suppress Fusarium wilt of watermelon (oral presentation). Elmer W, De La Torre-Roche R, Pagano L, White JC.

8th International Nanotoxicology Congress, June 1-4 2016, Boston, MA, USA.
Functional nanotoxicology applied to crop species exposed to engineered nanomaterials (oral presentation). Pagano L, Servin A, De La Torre-Roche R, Majumdar S, Hawthorne J, Marmiroli M, Maestri E, Marmiroli N, Parkash Dhankher O, White JC.

251st ACS National Meeting, March 13-17 2016, San Diego, CA, USA.
Trophic transfer of engineered nanoparticles in terrestrial food chains (oral presentation). De La Torre-Roche R, Servin A, Pagano L, Majumdar S, Hawthorne J, White JC.

2nd Parma NANODAY, December 3-4 2015, Parma, ITA.
Nanomaterials and crop plants: health and environmental safety related to molecular effects of ENMs exposure (oral presentation). Pagano L, Servin AD, De La Torre-Roche R, Majumdar S, Mukherjee A, Hawthorne J, Marmiroli M, Maestri E, Marra RE, Parkash Dhankher O, White JC, Marmiroli N.

An integrated multi-"omics"approach to understand CdS Quantum Dots (CdS QDs) response in Arabidopsis thaliana mutants (oral presentation). Imperiale D, Marmiroli M, Pagano L, Villani M, Zappettini A, Marmiroli N.

High through put genomic and transcriptomic analysis of CdS QDs response in Saccharomyces cerevisiae (poster). Pasquali F, Marmiroli M, Pagano L, Agrimonti C, Zappettini A, Tosato V, Bruschi C, Marmiroli N.

4th Sustainable Nanotechnology Organization Conference, November 8-10 2015, Portland, OR, USA.
Nanomaterials and crop plants: using molecular response to assess health and environmental safety after exposure (oral presentation). White JC, Pagano L, Marmiroli N.

12th International Conference on Phytotechnologies, September 27-30 2015, Manhattan, KS, USA.
Nanomaterials and crop plants: health and environmental safety related to molecular effects of ENMs exposure (poster). Pagano L, Servin A, De La Torre-Roche R, Majumdar S, Mukherjee A, Hawthorne J, Marmiroli M, Maestri E, Marra RE, Parkash Dhankher O, White JC, Marmiroli N.

Basis for cadmium sulphide quantum dot tolerance and sensitivity: a genome-wide nanotoxicology screening of *Saccharomyces cerevisiae* mutants (oral presentation). Marmiroli M, Pagano L, Pasquali F, Zappettini A, Tosato V, Bruschi C, Marmiroli N.

1st Parma NANODAY, November 28 2014, Parma, ITA.

Functional toxicogenomics of CdS QDs in *Arabidopsis thaliana* (oral presentation). Pagano L, Marmiroli M, Villani M, Marmiroli N.

Functional toxicogenomics of CdS QDs in *Saccharomyces cerevisiae* (poster). Pagano L, Marmiroli M, Pasquali F, Zappettini A, Tosato V, Bruschi C, Marmiroli N.

Proteomics of *Arabidopsis thaliana* mutants resistant to CdS Quantum Dots (CdS QDs) (poster). Imperiale D, Marmiroli M, Pagano L, Paredi G, Marmiroli N.

11th International Conference on Phytotechnologies, September 30 - October 3 2014, Heraklion, GRE.
Proteomics of *Arabidopsis thaliana* mutants resistant to CdS Quantum Dots (CdS QDs) (poster). Imperiale D, Marmiroli M, Pagano L, Marmiroli N.

Toxicogenomics of CdS QDs interactions with *Arabidopsis thaliana.* (oral presentation). Pagano L, Marmiroli M, Imperiale D, Marmiroli N.

Ricerca e Industria alleate per il futuro (Department inauguration event), November 11 2013, Parma, ITA.
Approccio genome-wide per la valutazione della tossicità di nanoparticelle CdS in *Arabidopsis thaliana* (oral presentation). Pagano L, Marmiroli M, Savo Sardaro ML, Marmiroli N.

10th International Conference on Phytotechnologies, October 1-4 2013 Syracuse, NY, USA.
Toxicogenomics of CdS nanomaterials in *Arabidopsis thaliana* and *Saccharomyces cerevisiae* (oral presentation). Pagano L, Marmiroli M, Savo Sardaro ML, Marmiroli N.

XV National Congress AIBG, September 27-28 2013, Arcavacata di Rende, ITA.
Toxicogenomics with model organisms: a new approach for studying the effects of chemicals and contaminants (oral presentation). Maestri E, Gullì M, Marmiroli M, Graziano S, Pagano L, Savo Sardaro M L, Marmiroli N.

12th International Conference on the Biogeochemistry of Trace Elements, July 16-20 2013, Athens, GA, USA.
Toxicogenomics of two *Arabidopsis* mutants resistant to CdS NPs (oral presentation). Marmiroli M, Pagano L, Savo Sardaro ML, Marmiroli N.

9th International Conference on Phytotechnologies, September 11-14 2012, Hasselt, BEL.
Whole-genome expression analysis of two *Arabidopsis* mutants resistant to CdS NPs (oral presentation). Marmiroli M, Pagano L, Savo Sardaro ML, Marmiroli N.

Impact of biochar on arsenic uptake in tomato plants (*Solanum lycopersicum* L.) (poster). Beesley L, Marmiroli M, Pagano L, Pigoni V, Marmiroli N.

MISTRAL Summer School, July 2-13 2012, Montpellier, FRA.
Toxicity and genotoxicity of nanomaterials in plants (poster). Pagano L, Marmiroli M, Savo Sardaro M L, Marmiroli N.

Nanomateriali e Salute, May 10-11 2012, Rome, ITA.
Physiological and genotoxic impacts of nanomaterial exposure on plants (poster). White JC, Marmiroli M, Pagano L, Savo Sardaro M L, Marmiroli N.

Second Annual Conference of COST Action FA0905 "What's for lunch? Nutrients and minerals in every day food", November 24-25 2011, Venice, ITA.
Physiological characterization and transcription analysis of two *Arabidopsis* mutants resistant to CdS nanoparticles (oral presentation). Marmiroli M, Pagano L, Savo Sardaro ML, Marmiroli N.

Uptake Of Arsenic Into Tomato Plants (*Solanum Lycopersicum* L.) Grown On A

Contaminated, Fertilised Mine Soil Amended With Biochar; Consequences For Soil Quality, Plant Health And Food Safety (poster). Beesley L, Marmiroli M, Pagano L, Pigoni V, Marmiroli N.

COST 869 "Mitigation Options for Nutrient Reduction in Surface Water and Groundwaters Conference", October 12-14 2011, Keszthely, HUN.

Managing N,P,K excesses in soils, from applied fertilisers, using biochar; direct implications to tomato plant (*Solanum lycopersicum* L.) health and consequences to the mobility and uptake of trace elements (poster). Beesley L, Marmiroli M, Pagano L, Pigoni V, Marmiroli N.

8th International Conference on Phytotechnologies, Portland, September 13-16 2011, OR, USA.

Regulation of genes involved in conferring resistance to CdS NPs in *Arabidopsis thaliana* (oral presentation). Marmiroli M, Pagano L, Savo Sardaro ML, Marmiroli N.

11th International Conference on the Biogeochemistry of Trace Elements, July 3-7 2011, Florence, ITA.

Phenotypic and genotypic characterization of two *Arabidopsis* mutants resistant to CdS nanoparticles (poster). Marmiroli M, Pagano L, Savo Sardaro ML, Marmiroli N.

Training Course of European Project TEMPUS, June 4-18 2011, Parma, IT.
Nanoparticles: structure and applications (oral presentation). Pagano L.

7th International Conference on Phytotechnologies, September 26-29 2010, Parma, ITA.

Phenotypic and genotypic characterization of two *Arabidopsis* mutants resistant to CdS nanoparticles (oral presentation). Marmiroli M, Pagano L, Savo Sardaro ML, Marmiroli N.

Autorizzo il trattamento dei miei dati ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 - Codice in materia di protezione dei dati personali.

In compliance with the Italian legislative Decree no. 196 dated 30/06/2003, I hereby authorize the use of my personal details.