PERSONAL INFORMATION

Silvia Lampis



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PERSONAL STATEMENT

Expert of Environmental Microbiology (biodegradation of toxic organic pollutant and biotransformation of metals/metalloids)
Associate Professor in Microbiology at Department of Biotechnology – University of Verona (Italy)
Scientific coordinator of VUCC-DBT (Verona University Culture Collections – Department of BioTechnology)

Professor Lampis's research interests cover different aspects of environmental microbiology: i) toxic organic microbial biodegradation, ii) metals/metalloids bacterial biotransformation, iii) microbial synthesis of metal nanostructures and their exploitation in nanobiotechnology field, iv) bacterial production of biobased products such as biosurfactants and polyhydroxyalkanoates, v) plant growth promoting bacteria and bacterial endophytes even as biocontrol agents..
She is the scientific coordinator of VUCC-DBT, the microbial culture collection at University of Verona, which was established at department of Biotechnology (DBT) to support valorisation/exploitation of microbial resources in the agro-food, environmental and industrial sectors in the framework of the project funded by MIUR which awarded DBT as department of excellence in the "Chemical Sciences" area, to develop biotechnological solutions for green chemistry applications. At present, VUCC-DBT holds approximately 500 microbial resources (yeasts and bacteria) with biotechnological potential and expertise microbial manipulation, identification and characterization for different specific applications. Since 2021, the VUCC-DBT is member of the Microbial Resource Research Infrastructure Italian Node (MIRRI-IT).

WORK EXPERIENCE

(from 01/11/2019 – current)

Associate Professor in Microbiology BIOS-15/A

Department of Biotechnology – University of Verona

Strada Le Grazie 15, 37134 Verona, Italy

Main activities and responsibilities: Coordination of the Environmental Microbiology Lab in terms of research activities in the field of basic and applied microbiology, microbial biotechnology of environmental microorganisms for the development of industrial and environmental biotechnological application; coordination and participation of different research project; teaching and supervision of B.Sc., M.Sc. and PhD students; Coordination of the MS course in 'Biotechnology for the bioresources and eco sustainable development' LM8 at University of Verona; Establishment of VUCC-DBT at Department of Biotechnology at University of Verona. Participation in several Committee at Department of Biotechnology.

(from 01/10/2007 to 31/10/209)

Assistant Professor in Microbiology BIO/19

Department of Biotechnology – University of Verona

Strada Le Grazie 15, 37134 Verona, Italy

Main activities and responsibilities: Participation/Organization of research activities at the Environmental Microbiology Lab in the field of basic and applied microbiology and microbial biotechnology. Main Topics covered: i) investigation of Microbial transformations of toxic organic compounds (PAHs, PFAS; TPH), bacterial biotransformation of metals/metalloids, biosynthesis of metal nanostructures, investigation on plant growth promotion traits in environmental strains and endophytes; analysis of microbial communities specialized in PHAs production. Teaching and supervision of B.Sc., M.Sc. and PhD students. Participation in several Committee at Department of Biotechnology.

EDUCATION AND TRAINING

(from 2006 – to 2007)

Postdoctoral Researcher
University of Verona – Department of Science and Technology
Postdoctoral fellowship entitled 'Characterization of PHAs producing bacterial cenosis from acidogenic sludges through PCR-DGGE and study of respiratory chinones' (01/08/2006-30/09/2007)

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(from 2002 – to 2005) **PhD in Molecular, Industrial and Environmental Biotechnology** (XVIII ciclo)
University of Verona – Department of Science and Technology
Thesis title: “New insights in microbial transformations of selenium: a biotechnological perspective”

(from 01/08/2004 to 31/07/2006) **Research fellowship**
University of Verona – Department of Science and Technology
Research fellowship entitled ‘ Study of soil-plant-microorganisms system for selenium hyperaccumulator plant species’.

(from 01/10/2002 to 31/07/2004) **Research fellowship**
University of Verona – Department of Science and Technology
Research fellowship entitled “Molecular characterization of bacterial strains capable of transforming condensed thiophens in pure culture’

(from 01/01/2002 to 30/06/2002) **Research fellowship** Institute for the Study of Ecosystem (ISE) Pisa CNR

(from 1994 – to 2001) **Degree in Agro-Industrial Biotechnology**
University of Verona
Thesis title “Characterization of bacterial cenosis of the rhizosphere of *Astragalus bisulcatus*, selenium hyperaccumulator plant, potentially exploitable for soil bioremediation protocols through phytoextraction.’
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BIBLIOMETRIC PARAMETERS

Author of Publications
69 documents; 2923 Citations by 2000 documents; h-index: 30; 135 co-authors (SCOPUS); Author of 3 book Chapters

INSTITUTIONAL RESPONSIBILITIES

(from 2007 - current) Member of the Department Council at the Department of Biotechnology – university of Verona
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(from 2009 – current) Member of the Teaching Council in Biotechnology at the Department of Biotechnology – University of Verona

(from 2014 – to 2016) Member of the Equity Commission at the Department of Biotechnology – University of Verona

(from 2019 – current) Member of the College of teachers of the Doctoral Program in Biotechnology of the University of Verona.

(from 2019 – current) Coordinator of the Master degree course in ‘ Biotechnology for the bioresources and the Eco sustainable development) at Department of Biotechnology – University of Verona

PROJECTS

(2000 – current)
CURRENT RESEARCH PROJECTS
As Principal Investigator
2026-2028 BIORESTORE – PFAS Cariverona Ricerca e Sviluppo
2022-2025 JointResearch project co-founded by UNIVR entitled ‘ Development of biotechnological products to bioremediate soil matrices polluted by triazole compounds’
2022-2026 SUS-MIRRI.IT Strengthening the MIRRI Italian Research Infrastructure for Sustainable Bioscience and Bioeconomy – in the frame of PNRR Infrastructures:
2023-2026 PRIN2022 – Se4SAFE – Coordinator of the Research Unit at the Dept. of Biotechnology – University of Verona

As member
2021-2023 Cariverona - Sviluppo di nanoemulsioni di origine naturale ad azione antibatterica per la protezione delle colture: dal laboratorio al campo.
2019-2022 Regione Veneto Bando - DGR N. 736 Misura 16.1- MI.DI.FEN.DO. Uso di MIcrorganismi nella DIfesa della vite contro la FlavEsceNza DOrata -

PAST RESEARCH PROJECTS
2018-2022 JP2018- UniVR - 'Microbially-tailored biobeds to face on-farm point-source pollution at areas devoted to filling and cleaning operations of

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pesticide application equipment'.
2017-2021 TEMART - Tecnologie e Materiali per la Manifattura artistica, i beni culturali, l'arredo, il decoro arhitettonico e urbano e il design del futuro - RIR - Regione Veneto
2017-2021 JP2017-UniVR- 'Development of sinthetic textile materials with antimicrobial properties by using biogenic selenium nanoparticles'.
2017-2020 JP2017 - UNIVR – ' Messa punto di un protocollo per la colonizzazione endofitica in Vitis vinifera del batterio "plant growth-promoting" Pseudomonas protegens MP12 per l'acquisizione di resistenza all'attacco di funghi fitopatogeni'. (member)
2016-2017 Programma Operativo FSE 2014-2020 – Asse 'Capitale umano' – Regione Veneto – 'Analisi dell'efficacia di bionanomateriali per l'inibizione ed eradicazione di biofilm microbici su superfici ad uso industriale'.(P.I.)
2016-2019 JP 2015 - UNIVR – 'Biological reclamation of polluted dredged sediments'. (P.I)
2016-2017 Programma Operativo FSE 2014-2020 – Asse 'Capitale umano' – Regione Veneto – 'Sviluppo di una procedura innovativa per il restauro di manufatti lapidei di interesse artistico mediante bio-pulitura e bio-cementazione, basata sullo sfruttamento integrato di microorganismi idrocarbonoclastici e del processo di carbonatogenesi microbica'. (mmber)
2015-2018 JP 2014 – UNIVR – 'Biocleaning of stone artworks by a combined use of hydrocarbon degrading microbial strains and sulfate reducing bacteria'. (member)
2012-2014 JP 2011 – UNIVR – 'Sviluppo di Inoculi Microbici per il recupero di terreni forestali percorsi da incendio'.(member)
2007-2011 Regione Toscana – APQ Ricerca e trasferimento tecnologico per il sistema produttivo: "R.E.P.E.T. (Rhizosphere-Enhanced Phyto-Extraction Technology)";(member)
2011-2013 MAE - XVII Executive Programme of Scientific and Technological Co-operation between Italy and Hungary for the years 2011-2013: "Optimization of soil-plant- microbe interactions in the bioremediation of soils polluted with toxic organic compounds and heavy metals" (member)
2008-2010 MAE - XVII Executive Programme of Scientific and Technological Co-operation between Italy and Hungary for the years 2008-2010: "Plant-microbe interactions in bioremediation of polluted environmental matrices" (member)
2006-2008 MIUR PRIN 2005 - "Dinamica e caratterizzazione molecolare delle cenosi batteriche accumulatrici di poliidrossialcanoati a seguito di processi sequenziali anaerobici/aerobici per lo sfruttamento delle acque di vegetazione dei frantoi oleari" (member)

INTERACTION WITH PRIVATE COMPANIES

2015 to today; numerous fruitful collaborations with private companies through the activation of conventions, services or co-financed projects of research and development mainly in environmental microbiology and industrial microbial biotechnology. List of Main collaborations:

- Acque del Chiampo srl – Titolo' Valutazione della trattabilità biologica di carboni attivi esausti e percolati di discarica contenenti PFAS". Durata :18 mesi [2026-2027]; Importo: 58000 Euro + IVA
- Reckitt-Benkiser spa – Titolo: 'Develop and complete the protocol setup on xCelligence RTCA for biofilm quantification'. Durata : 9 mesi [2026-2027]; Importo: 24000 Euro + IVA
- BIONIKS srl – Titolo: "Analisi di parametri di processo per la produzione di cellulosa da parte di 3 ceppi batterici" Durata: 6 mesi [2024]; Importo: 14600 Euro + IVA
- "Trattabilità di acque inquinate da selenio,attraverso protocolli di biorisanamento che prevedano l'impiego di ceppi microbici,capaci di biotrasformare tali inquinanti' Consulenza commissionata Dr. Monnanni in collaborazione con TCA spa. Durata 3 mesi [2024], Importo : 5000 Euro + IVA

REVIEWER'S ACTIVITY AND EDITORIAL BOARD

Act as a reviewer for: African Journal of Microbiology Research; AMAB - Applied Microbial and Biotechnology, Applied Water Science; Bioresource Technology; BFSO - Biology and Fertility of Soil, Chemosphere; Ecotoxicology and Environmental Safety; Environmental Science and Pollution Research; Int J Phytoremediation, Journal of Hazardous Materials; Microbial Biotechnology, Microbial Cell Factories, New Biotechnology, Plants, PLOS ONE, Microorganisms.

TEACHING ACTIVITIES

(current) Lecturer of 'Biotecnologie microbiche industriali [6 CFU]' - CdS 'Biotecnologie per le biorisorse e lo sviluppo ecosostenibile' [LM8-UNIVR] - aa 2019/2020; 2020/2021; 2021/2022; 2022/2023; 2023/2024; 2024/2025; 2025/2026
Lecturer 'Microbiologia ambientale e biorisanmento' [3 cfu]- CdS 'Biotecnologie per le biorisorse e lo sviluppo ecosostenibile' [LM8-UNIVR] - aa 2020/2021; 2021/2022; 2022/2023; 2023/2024; 2024/2025; 2025/2026
Lecturer 'Microbiologia del suolo e interazioni pianta-microorganismi' [4CFU] - CdS Biotecnologie [L2 UNIVR] aa 2020-2021; 2021/2022; 2022/2023; 2023/2024.
Lecturer 'Interazioni suolo-pianta-microrganismi' [2CFU] – CdS Biotecnologie [L2 UNIVR] aa 2024/2025; 2025/2026
Lecturer 'Microbiologia'-Practical class -[2CFU] aa 2015-2016: 2016-2017; 2017-2018; 2018-2019; 2019-2020, 2020-2021; 2021/2022; 2024/2025; 2025/2026
Lecturer 'Biotecnlogie per la bioeconomia circolare' [2 CFU] – CdS Biotecnologie [L2 UNIVR] aa 2021/2022; 2022/2023; 2023/2024; 2024/2025; 2025/2026

(past)

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Lecturer of 'Biotecnologie' [6 CFU]' - CdS BIOTECNOLOGIE PER L'AMBIENTE E LO SVILUPPO SOSTENIBILE [LM8-Ca' foscari Venezia] - aa 2020/2021
Lecturer 'Microbial biosynthesis of nanostructured materials [6 CFU]- CdS Scienze dei Bio e Nano Materiali [LM-53 Università di Venezia Ca' Foscari] aa 2013-2014; 2014-2015; 2015-2016; 2016-2017; 2017-2018; 2018-2019;
Lecturer 'Metodologie di Microbiologia' [3 CFU] - CdS Biotecnologie [L2 UNIVR] aa 2009-2010; 2011-2012; 2012-2013; 2013-2014; 2014-2015
Lecturer 'Microbiologia Applicata Ambientale' [3,5 CFU] CdS In Biotecnologie Agro-Industriali UNIVR) aa 2007-2008, 2008-2009, 2009-2010

PUBLICATIONS

Relevat Publication

2026

Righetti D., Tamayo B.K.S., Lampis S.*, and Lens P. Effects of Per- and Polyfluoroalkyl Compounds (PFASs) on Anaerobic Granular Sludge: Methane Production and Microbial Community Composition. Microbial Ecology Pre-print (2026). https://doi.org/10.1007/s00248-026-02793-4

Jaberi, M., Andreolli, M., Salvetti, E., Valeri P., Vallini G., and Lampis S. A novel polyhydroxyalkanoate-storing bacterium *Thauera carbonocopians* sp. nov. isolated from a sequencing batch reactor fed with volatile fatty acids. *Sci Rep* **16**, 6926 (2026). https://doi.org/10.1038/s41598-026-37556-1

2025

Ferrocino I, Ferrara M, Garello M, Turchetti B, Andreolli M, Arena MP, Alduina R, Aloi F, Bevivino A, Bruno E, Capozzi V, Coronas R, De Vero L, Di Renzo T, Franzetti A, Gaglio R, Gallo G, Gullo M, Guarcello R, Giavalisco M, Lampis S, Mugnai G, Quatrini P, Reale A, Sbarra F, Sannino C, Spadaro D, Tatangelo V, Visca A, Zara G, Zotta T, Varese GC, Cocolin L. Standardizing microbiome research: interlaboratory validation of SOPs for sample preparation and DNA extraction from food and environmental ecosystems. Environ Microbiome. 2025 Dec 12;21(1):14. doi: 10.1186/s40793-025-00833-z. PMID: 41388332; PMCID: PMC12817780.

Danzi, D., Thomas, M., Cremonesi, S. Sadeghian F., Staniscia G., Andreolli M., Bovi M., Polverari A., Tosi L., Bonaconsa M., Lampis S., Spinelli F., Vandelle E.*G.* Essential oil-based emulsions reduce bacterial canker on kiwifruit plants acting as antimicrobial and antivirulence agents against *Pseudomonas syringae* pv. *actinidiae*. *Chem. Biol. Technol. Agric.* **12**, 23 (2025). https://doi.org/10.1186/s40538-025-00743-9

Trad, B., Branes, Z., Betouil, A.A., Lampis S., et al Biodegradation of high-density polyethylene (HDPE) using bacterial strains isolated from fresh bovine feces. *Biodegradation* **36**, 111 (2025). https://doi.org/10.1007/s10532-025-10205-6

2024

Lebano, I., Fracchetti, F., Vigni, M.L. Meija J.F., Felis G., Lampis*, S. MALDI-TOF as a powerful tool for identifying and differentiating closely related microorganisms: the strange case of three reference strains of *Paenibacillus polymyxa*. *Sci Rep* **14**, 2585 (2024). https://doi.org/10.1038/s41598-023-50010-w

Pesante G., Tesoriero C., Cadoria E., Andreolli M., Lampis S., Vettori A., Frison, N.
Valorisation of agricultural residues into Thauera sp. Sel9 microbial proteins for aquaculture, Environmental Technology & Innovation, Volume 36, 2024, 103772, ISSN 2352-1864, https://doi.org/10.1016/j.eti.2024.103772.

Moretti, M.; Tartaglia, J.; Accotto, G.P.; Beato, M.S.; Bernini, V.; Bevivino, A.; Boniotti, M.B.; Budroni, M.; Buzzini, P.; Carrara, S.; et al. Treasures of Italian Microbial Culture Collections: An Overview of Preserved Biological Resources, Offered Services and Know-How, and Management. *Sustainability* **2024**, *16*, 3777. https://doi.org/10.3390/su16093777

Kovács, B.; Andreolli, M.; Lampis, S.; Biró, B.; Kotroczó, Z. Bacterial Community Structure Responds to Soil Management in the Rhizosphere of Vine Grape Vineyards. *Biology* **2024**, *13*, 254. https://doi.org/10.3390/biology13040254

Battista F., Zeni A., Andreolli M., Salvetti E., Rizzioli F., Lampis S., Bolzonella D.,
Treatment of food processing wastes for the production of medium chain fatty acids via chain elongation,

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Environmental Technology & Innovation,
Volume 33, 2024, 103453, ISSN 2352-1864, https://doi.org/10.1016/j.eti.2023.103453.

Bombardi, L.; Salini, A.; Aulitto, M.; Zuliani, L.; Andreolli, M.; Bordoli, P.; Coltro, A.; Vitulo, N.; Zaccone, C.; Lampis, S.; et al. Lignocellulolytic Potential of Microbial Consortia Isolated from a Local Biogas Plant: The Case of Thermostable Xylanases Secreted by Mesophilic Bacteria. *Int. J. Mol. Sci.* **2024**, *25*, 1090. https://doi.org/10.3390/ijms25021090

2023
Andreolli, M. Villanova, V Zanzoni, S. Vallini G., Secchi, N. **Lampis**, S.
Characterization of trehalolipid biosurfactant produced by the novel marine strain Rhodococcus sp. SP1d and its potential for environmental applications
Microbial Cell Factories, 2023, 22(1), 126

Andreolli, M-, Lampis, S.,Tosi, L.., Marano, V.., Zapparoli, G.
Fungicide sensitivity of grapevine bacteria with plant growth-promoting traits and antagonistic activity as non-target microorganisms
World Journal of Microbiology and Biotechnology, 2023, 39(5), 121

2022
Andreolli, M., Scerbacov, V., Frison, N., Zaccone, C., Lampis, S.
Thauera sp. Sel9, a new bacterial strain for polyhydroxyalkanoates production from volatile fatty acids
New Biotechnology, 2022, 72, pp. 71–79

Shiriaev, A., Pezzarossa, B., Rosellini, I., Lampis S., ...Ippolito, A., Tonutti, P.
Efficacy and Comparison of Different Strategies for Selenium Biofortification of Tomatoes
Horticulturae, 2022, 8(9), 800

2021
Andreolli M., Lampis S., Lorenzini M., Zapparoli G. Features of basidiomycetous yeasts from grapes and apples associated with crop environment and fermenting juice. 2021. J Appl Microbiol, Oct;131(4):1932-1941. doi: 10.1111/jam.15083. Epub 2021 Apr 3. PMID: 33759285

Baggio G., Groves R.A., Chignola R., Piacenza E., Presentato A., Lewis I.A., Lampis S., Vallini G. Untargeted Metabolomics Investigation on Selenite Reduction to Elemental Selenium by Bacillus mycoides SeITE01. 2021. Front Microbiol 12, 711000 https://www.frontiersin.org/article/10.3389/fmicb.2021.711000

Strazzera, G., Battista, F., Andreolli, M., Menini, M., Bolzonella, D., Lampis, S. (2021). Influence of different household Food Wastes Fractions on Volatile Fatty Acids production by anaerobic fermentation. 2021. Bioresourse Technol. 335, 125289. https://doi.org/10.1016/j.biortech.2021.125289

Frison N., Andreolli* M., Botturi A., Lampis S., Fatone F. Effects of the Sludge Retention Time and Carbon Source on Polyhydroxyalkanoate-Storing Biomass Selection under Aerobic-Feast and Anoxic-Famine Conditions. 2021. ACS Sustainable Chemistry and Engineering 9(28), pp. 9455-9464. https://doi.org/10.1021/acssuschemeng.1c02973

Franco, G., Manca, V., Andreolli, M., Lampis, S. Emergence of random selections in evolution of biological populations. 2021. Theoretical Computer Science, 862, pp. 130-143

Andreolli, M., Zapparoli, G., Lampis, S., Angelini, E., Bertazzon, N. In vivo endophytic, rhizospheric and epiphytic colonization of vitis vinifera by the plant-growth promoting and antifungal strain pseudomonas protegens MP12. 2021. Microorganisms, 9(2), pp. 1–14, 234

Andreolli, M., Lampis, S., Brignoli P., Vallini G. Mesocosm-based simulations to optimize a bioremediation strategy for the effective restoration of wildfire-impacted soils contaminated with high-molecular-weight hydrocarbons. 2021. Journal of Applied Microbiology, 131(3), pp. 1249-1260 DOI: 10.1111/jam.15018

Bulgarini, A., Lampis, S., Turner, R.J., Vallini, G. Biomolecular composition of capping layer and stability of biogenic selenium nanoparticles synthesized by five bacterial species. 2021. Microbial Biotechnology, 14(1), pp. 198–212. https://doi.org/10.1111/1751-7915.13666

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Botturi, A.; Battista, F.; Andreolli, M.; Faccenda, F.; Fusco, S.; Bolzonella, D.; Lampis, S.; Frison, N. Polyhydroxyalkanoated-Rich Microbial Cells from Bio-Based Volatile Fatty Acids as Potential Ingredient for Aquaculture Feed. Energies 2021, 14, 38. https://doi.org/10.3390/en14010038

2020

Bolzonella, D., Battista, F., Mattioli, A., ...Frison, N., Lampis, S. Biological thermophilic post hydrolysis of digestate enhances the biogas production in the anaerobic digestion of agro-waste. Renewable and Sustainable Energy Reviews, 2020, 134, 110174

Ojeda, J.J., Merroun, M.L., Tugarova, A.V., ...Kamnev, A.A., Gardiner, P.H.E. Developments in the study and applications of bacterial transformations of selenium species. Critical Reviews in Biotechnology, 2020, 40(8), pp. 1250–1264

Andreolli, M., Lampis, S., Bernardi, P., Calò, S., Vallini, G. Bacteria from black crusts on stone monuments can precipitate CaCO 3 allowing the development of a new bio-consolidation protocol for ornamental stone. International Biodeterioration and Biodegradation, 2020, 153, 105031

Presentato, A., Lampis, S., Vantini, A., ...Zuccoli, S., Vallini, G. On the ability of perfluorohexane sulfonate (PFHxS) bioaccumulation by two *Pseudomonas* sp. strains isolated from PFAS - contaminated environmental matrices. Microorganisms, 2020, 8(1), 92

2019

Milanesi C., Faleri C., Cresti M., Andreolli M., Lampis S., Vallini G., Sfriso A., Gallo M. and Baldi F. Apple seeds in an excavated Roman amphora remained intact for 2000 years despite exposure to a broadly-degrading microbial community. Journal of Archaeological Science: Reports 2019 25: 472-485 https://doi.org/10.1016/j.jasrep.2019.04.024

Andreolli M., Zapparoli G., Angelini E., Lucchetta G., Lampis S.*, Vallini G. *Pseudomonas protegens* MP12: A plant growth-promoting endophytic bacterium with broad-spectrum antifungal activity against grapevine phytopathogens. Microbiol Res. 2019 219:123-131. doi: 10.1016/j.micres.2018.11.003. Epub 2018 Nov 23.

Piacenza E., Presentato A., Bardelli M., Lampis S.*, Vallini G., Turner R.J. Influence of Bacterial Physiology on Processing of Selenite, Biogenesis of Nanomaterials and Their Thermodynamic Stability. Molecules. 2019 Jul 11;24(14). pii: E2532. doi: 10.3390/molecules24142532.

2018

Piacenza E, Presentato A, Ambrosi E, Speghini A, Turner RJ, Vallini G, Lampis S. Physical-Chemical Properties of Biogenic Selenium Nanostructures Produced by *Stenotrophomonas maltophilia* SeITE02 and *Ochrobactrum* sp. MPV1. Front Microbiol. 2018 Dec 19;9:3178. doi: 10.3389/fmicb.2018.03178. eCollection 2018.

Cremonini E, Boaretti M, Vandecandelaere I, Zonaro E, Coenye T, Lleo MM, Lampis S*, Vallini G. Biogenic selenium nanoparticles synthesized by *Stenotrophomonas maltophilia* SeITE02 loose antibacterial and antibiofilm efficacy as a result of the progressive alteration of their organic coating layer. Microb Biotechnol. 2018 Nov;11(6):1037-1047. doi: 10.1111/1751-7915.13260. Epub 2018 Apr 10.

Doni S., S., Macci C., Martinelli C., Iannelli R., Brignoli P., Lampis S., Andreolli M., Vallini G., Masciandaro G. Combination of sediment washing and bioactivators as a potential strategy for dredged marine sediment recovery. Ecological Engineering, 2018 125: 26-37

Piacenza E., Presentato A., Zonaro E., Lampis S., Vallini G., Turner RJ. Selenium and tellurium nanomaterials. Physical Sciences Reviews. 2018; 20170100 DOI: 10.1515/psr-2017-0100

2017

Piacenza E., Presentato A., Zonaro E., Lampis S., Vallini G., Turner RJ. 2017. Microbial-Based Bioremediation of Selenium and Tellurium Compounds, Biosorption, Jan Derco and Branislav Vrana, IntechOpen, DOI: 10.5772/intechopen.72096. Available from: https://www.intechopen.com/books/biosorption/microbial-based-bioremediation-of-selenium-and-tellurium-compounds

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Piacenza E, Presentato A, Zonaro E, Lemire JA, Demeter M, Vallini G, Turner RJ, Lampis S. Antimicrobial activity of biogenically produced spherical Se-nanomaterials embedded in organic material against *Pseudomonas aeruginosa* and *Staphylococcus aureus* strains on hydroxyapatite-coated surfaces. Microb Biotechnol. 2017 Jul;10(4):804-818. doi: 10.1111/1751-7915.12700.

Zonaro E, Piacenza E, Presentato A, Monti F, Dell'Anna R, Lampis S*, Vallini G. *Ochrobactrum* sp. MPV1 from a dump of roasted pyrites can be exploited as bacterial catalyst for the biogenesis of selenium and tellurium nanoparticles. Microb Cell Fact. 2017. 16(1):215. doi: 10.1186/s12934-017-0826-2

Khoei NS, Lampis S*, Zonaro E, Yrjälä K, Bernardi P, Vallini G. Insights into selenite reduction and biogenesis of elemental selenium nanoparticles by two environmental isolates of *Burkholderia fungorum.* N Biotechnol. 2017. 34:1-11. doi: 10.1016/j.nbt.2016.10.002. Epub 2016 Oct 4.

Lampis S*, Zonaro E, Bertolini C, Cecconi D, Monti F, Micaroni M, Turner RJ, Butler CS, Vallini G. Selenite biotransformation and detoxification by *Stenotrophomonas maltophilia* SeITE02: Novel clues on the route to bacterial biogenesis of selenium nanoparticles. J Hazard Mater. 2017 324: 3-14. doi: 10.1016/j.jhazmat.2016.02.035.

Andreolli M., Lampis S.*, Vallini G. Diversity, Distribution and Functional Role of Bacterial Endophytes in Vitis vinifera - [Chapter 10] © Springer International Publishing AG 2017 D.K. Maheshwari (ed.), Endophytes: Biology and Biotechnology, Sustainable Development and Biodiversity 15, DOI 10.1007/978-3-319-66541-2_10

2016

Cremonini E, Zonaro E, Donini M, Lampis S, Boaretti M, Dusi S, Melotti P, Lleo MM, Vallini G. Biogenic selenium nanoparticles: characterization, antimicrobial activity and effects on human dendritic cells and fibroblasts. Microb Biotechnol. 2016 Jun 20. doi: 10.1111/1751-7915.12374.

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