ANNA LUISA COSTA
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I am born in Ravenna, Italy in 1968, and since 1996 I am working at ISTEC, from 2008 with permanent position. I acquired knowledge, skills and competence in different fields : structure-properties correlation applied to ceramic engineering; sol-gel synthesis applied to the design of multi-component and multi-functional nano-phases, applied in environmental nanotechnology applications, characterisation of colloidal properties; technology transfer of ceramic nanostructured coatings and their functional characterisation (photoactive membranes, antibacterial surfaces, multi-functional textile). I am recently investigating properties and mechanisms of nano-world in biological environment, clinging to the idea that nano-phases have a great potential for the development of more efficient, less expensive and more sustainable systems for environmental pollution remediation.

Education

ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA	1992 - Laurea Degree (Bachelor of Science + Master) in Pure Chemistry (cum laude) Advisor: Prof. E. Tagliavini.
	1996 - PhD in Chemical Science (Title: "Strategies of asymmetric synthesis in organic chemistry") Advisor: Prof. A. Umani-Ronchi.
	1996 – 2006 Postdoc Research Fellowships

Main Research Experience (Last 10 years)

istec	Since 2010 Head of Nanotechnology and Nanosafety Group.
Ministero della Difesa	Scientific responsible at ISTEC of the National project: Fabricsafe, funded by Italian Ministry of Defence (Defense of humans through the fabrication of intelligent textile acting as active and passive protection. 2016-2017.
PRO BIO POL	Coordinator of National projects: Probiopol (Innovative and sustainable production of biopolymers), Prototype I and II (Prototyping ProBioPol results), funded by CNR / Fabbrica del Futuro. 2014-2016
Sanowork	Coordinator of EU-funded research collaborative project "Safe Nano Worker Exposure Scenarios" – SANOWORK (FP7-280716). 2012-2015, EU contribution : 3500000 €. *We were pioneer in the promotion of safe by design approach applied to nano-enabled products and processes. Integration of nanoparticles surface functionalization or controlled aggregation steps for the management of hazard and/or exposure potential risk.*

SUN	Work package leader (strategies of safe by design) of European research project SUN (SUstainable Nanotechnology, FP7-604305). 2013-2017, EU contribution : 13585305,20€.
protect	Partner (strategies of safe by design and exposure monitoring) of European research project PROTECT (Pre-commercial lines for production of surface nanostructured antimicrobial and anti-biofilm textiles, medical devices and water treatment membranes, H2020-NMBP-PILOTS-2016- 720851). 2017-2020, EU contribution: 9441862,50€.
PATROLS Advanced Tools for NanoSafety Testing	Work package leader (materials characterisation and dosimetry issues) of European research project PATROLS (Physiologically Anchored Tools for Realistic nanOmateriaL hazard aSsessment, H2020-NMBP-2017-760813). 2018-2021, EU contribution: 13108347,50€.
BIO RIMA BIOmaterial Risk MAnagement	Work package leader (strategy of safe by design) of European research project BIORIMA (BIOmaterial RIsk MAnagement, H2020-NMBP-2017-760928). 2017-2021, EU contribution: 8761418,75€.
nanoinformatiX	Task leader (selection and implementation of project case studies) of European research project NANOINFORMATIX (Development and Implementation of a Sustainable Modelling Platform for NanoInformatics, H2020-NMBP-TO-IND-2018- 814426). 2019-2023, EU contribution : 7751271,25€.
SAbyna	Work package leader (development of safer products, managing risks along their life cycle, applying safe-by-design strategies) of European research project Sabyna (Simple, robust and cost-effective approaches to guide industry in the development of safer nanomaterials and nano-enabled products), H2020-NMBP-TO-IND-2018-2020-862419). 2020-2023, EU contribution : 5999068,75 €.
ASINA	Coordinator of the European reserach project ASINA (Anticipating Safety Issues at the Design Stage of NAno Product Development, H2020-NMBP-TO-IND-2018-2020- 862444). 2020-2023, EU contribution : 5998386,25€.

Scientific production

Author of about 90 papers on ISI journals; H-index: 21; Citations: 1445 (Scopus). Author and co-author of 2 international patents, 5 chapters of books and more than 80 communication in international conferences (more than 20 oral invitation).
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Google Scholar ID:
https://scholar.google.it/citations?hl=it&user=gUfSQSIAAAAJ&view_op=list_works
Research Gate: https://www.researchgate.net/profile/Anna_Costa12
Since 2020 topic editor of journal Nanomaterials (IF 4.034,
http://www.mdpi.com/journal/nanomaterials)

Teaching

- Set. 2006 –Set. 2008 Chemistry Teacher at Public Secondary School.
- I am co-tutoring regularly undergraduate and Ph.D students, planning and supervising their thesis experimental work.
- From 2008 Annual seminars at Bachelor's degree students and Ph.D School of Chemical Science, University of Bologna.
- From 2010 Participation as teacher at monthly Exhibition / Training events for primary, secondary schools, citizens, industrial associations.

Prizes / Exhibition

- 2010 - Festival della Scienza, Genova: Winner of the start cup CNR-Il sole 24 Ore 2010 for the Nord Italy, with the project "Ceramic Textile"
- 2013-2016 - Interactive exhibition "Italia del futuro": Interative station n. 16 (over 20): "Technological textiles", interactive exhibit presenting natural textiles which, after a process of ceramization, show self cleaning properties once exposed at the sunlight. Ed 2013 (Tokio, San Francisco, Los Angeles, Budapest); Ed. 2014 (Bruxelles, Madrid, Podgorica, Stockholm); 2015-2016 (Buenos Aires, Cordoba, Santiago Del Estero, Mexico City).
- 2016 - Stand at Fiera Bi-MU, Milano, showing two pilot plants (photoreactors) that were developed under the project Probiopol for the photodegradation of water organic pollutants.
- 2018 - Best Pitch Award at Nanoinnovation 2018, with a presentation: "Production of nanostructured microcapsule as powerful tool in green chemistry".

Bibliography from 2018

Amorim, M.J., Lin, S., Schlich, K., Navas, J.M., Brunelli, A., Neubauer, N., Vilsmeier, K., Costa, A.L., Gondikas, A., Xia, T., **2018**. Environmental impacts by fragments released from nanoenabled products: a multiassay, multimaterial exploration by the SUN approach. Environmental science & technology 52, 1514–1524.

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Koivisto, A.J., Kling, K.I., Fonseca, A.S., Bluhme, A.B., Moreman, M., Yu, M., Costa, A.L., Giovanni, B., Ortelli, S., Fransman, W., **2018**. Dip coating of air purifier ceramic honeycombs with photocatalytic TiO2 nanoparticles: A case study for occupational exposure. Science of the Total Environment 630, 1283–1291.

Líbalová, H., Costa, P.M., Olsson, M., Farcal, L., Ortelli, S., Blosi, M., Topinka, J., Costa, A.L., Fadeel, B., **2018**. Toxicity of surface-modified copper oxide nanoparticles in a mouse macrophage cell line: Interplay of particles, surface coating and particle dissolution. Chemosphere 196, 482–493.

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Ortelli, S., Costa, A.L., **2018**. Nanoencapsulation techniques as a "safer by (molecular) design" tool. Nano-Structures & Nano-Objects 13, 155–162.

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Zanoni, I., Fiorini, V., Rosado, M., Ballesteros, B., Androulidaki, M., Blosi, M., Ortelli, S., Stagni, S., Dondi, M., Luisa Costa, A., **2018**. Encapsulation of cationic iridium(iii) tetrazole complexes into a silica matrix: synthesis, characterization and optical properties. New Journal of Chemistry 42, 9635–9644

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Il presente Curriculum è reso sotto forma di dichiarazione sostitutiva di certificazione e di dichiarazione sostitutiva dell'atto di notorietà ai sensi degli artt. 46 e 47 del d.P.R. 445/2000. All'uopo il sottoscritto dichiara di essere consapevole della responsabilità penale prevista, dall'art. 76 del citato decreto per le ipotesi di falsità in atti e dichiarazioni mendaci ivi indicate.

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