MARCELLA SALVATORE

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Summary

I received my Master's degree in Materials Engineering in 2013 and a Ph.D. in Industrial Product and Processes Engineering in 2017, both from the University of Naples Federico II. I have published about 40 peer-reviewed articles in leading scientific journals, with an h-index of 14. I have actively participated in writing several proposals that have received fundings for ~4 M€ in the last two years. In addition to my research, I am actively involved in international collaborative projects and regularly present my work at topical conferences on materials science, optics, and photonics applications.

Education

2017	**PhD in Industrial Product and Process Engineering,** University of Naples Federico II, Grade: **Excellent**
2015	**Erasmus+ - PhD program** *Institute of Nuclear Chemistry and Technology (INCT), Warsaw (Poland)* Research group of professor Yongxia Sun.
2015	**Erasmus+ - PhD program** *University of Palermo (UniPA), Palermo (Italy)* Research group of professor Clelia Dispenza.
2013	**Master's Degree in Materials Engineering** University of Naples Federico II, Grade: **110/110 cum laude**

Current positions

Since 2024	**Junior Researcher (RTD-A)** *Department of Physics "Ettore Pancini" – University of Naples Federico II*
Since 2025	**Department Board member** *Department of Physics "Ettore Pancini" – University of Naples Federico II*

Previous positions

2022 - 2024	**Laboratory scientific technician** *Centro di Servizi Metrologici e tecnologici Avanzati (CESMA) – University of Naples Federico II*
2021 - 2022	**Post-doctoral Fellowship** *Centro di Servizi Metrologici e tecnologici Avanzati (CESMA) – University of Naples Federico II*

2017 - 2021	**Post-doctoral Fellowship** *Department of Physics "Ettore Pancini" – University of Naples Federico II*

Teaching Activities

2019 - 2024	Teaching activity for "Physics Laboratory" – Master's degree course in Physics at the *Department of Physics "Ettore Pancini" – University of Naples Federico II.*
2020 – 2022	Teaching activity for "Optics Laboratory" – Bachelor's degree course in Physics at the *Department of Physics "Ettore Pancini" – University of Naples Federico II.*
2019 – 2020	Teaching activity for "Laboratory 2" – Bachelor's degree course in Physics at the *Department of Physics "Ettore Pancini" – University of Naples Federico II.*
2017 – 2021	Co-tutor for 5 Master's and Bachelor's degree thesis at *Department of Physics "Ettore Pancini" – University of Naples Federico II.*

International Conferences

2025	Speaker – *BiOrgaMCT 2025* – **March 2025, Sofia, Bulgaria**
2025	Speaker – *SPIE Photonics West 2025* – **January 2025, S. Francisco, CA, USA**
2024	Speaker – *IEEE IPC 2024* – **November 2019 Rome, Italy.**
2024	Speaker – *CMD 31* – **1-6 September 2024, Braga, Portugal.**
2023	Poster – *PhoSM 2023* – **December 2023, St.Petersbourg, FL, USA**
2023	Speaker – *FISMAT CMD 30* – **September 2023, Milan, Italy.**
2023	Speaker – *PIERS 2023* – **July 2023 Prague, Rep.Cec.**
2022	Speaker – *SPIE Photonics Europe* – **April 2022, Strasburg, France.**
2022	Speaker – *CLEO 2022* – **May 2022, San Josè, CA, USA**
2021	Speaker – *MRS Fall Meeting 2021* – **November 2021, Boston, MA, USA.**
2019	Speaker – *PIERS 2019* – **June 2019 Rome, Italy.**
2016	Invited Speaker – *Bit's World Congress 2016* – **March 2016, Singapore**.
2015	Poster – *IEEE NANO 2015* – **July 2015, Rome-Italy**
2015	Poster – *E-MRS Spring Meeting 2015* – **May 2015, Lille, France**

Selected Scientific outputs

YEAR	PUBLICATION
2025	Original article - **Salvatore M.**, Reda F., Borbone F., Oscurato, S.L. – *Multilevel azopolymer patterning from digital holographic lithography* – RSC Applied Interfaces, **2025**, 2, 56-60.
2023	Original article **–** Reda F., **Salvatore M.**, Astarita M., Borbone F., Oscurato S.L., *"Reprogrammable Holograms from Maskless Surface Photomorphing*", Advanced Optical Materials, 2023, 11(21), 2300823
2023	Original article – Januariyasa I.K., Borbone, F., **Salvatore M.***, Oscurato S.L., "*Wavelength-Dependent Shaping of Azopolymer Micropillars for Three-Dimensional*

	Structure Control", ACS Applied Materials and Interfaces, 2023, 15(36), pp. 43183–43192
2022	Original article - Reda F., **Salvatore M.**, Borbone F., Maddalena, P., Oscurato, S.L. – *Accurate Morphology-Related Diffraction Behavior of Light-Induced Surface Relief Gratings on Azopolymers* – ACS Materials Letters, **2022**, 4(5), pp. 953–959
2022	Original article – S. L. Oscurato, F. Reda, **M. Salvatore**, F.Borbone, P. Madfromena, A. Ambrosio, *" Large-Scale Multiplexed Azopolymer Gratings with Engineered Diffraction Behavior",* Advanced Materials Interfaces 8 (21), 2101375.
2022	Original article – S. L. Oscurato, F. Reda, **M. Salvatore**, F.Borbone, P. Madfromena, A. Ambrosio, *" Large-Scale Multiplexed Azopolymer Gratings with Engineered Diffraction Behavior",* Advanced Materials Interfaces 8 (21), 2101375.
2021	Original article - **Salvatore M.**, Borbone F., Reda F., Maddalena P., Oscurato S.L. – *Programmable surface anisotropy from polarization-driven azopolymer reconfiguration* – JPhys Photonics, **2021**, 3(3), e034013.
2020	Original article - **Salvatore M.**, Borbone F., Oscurato S.L. – *Deterministic Realization of Quasicrystal Surface Relief Gratings on Thin Azopolymer Films* – Advanced Materials Interfaces, **2020**, 7(11), 1902118.
2018	Review article - Oscurato S.L., **Salvatore M.**, Maddalena P., Ambrosio, A. – *From nanoscopic to macroscopic photo-driven motion in azobenzene-containing materials* - Nanophotonics, **2018**, 7(8), pp. 1387–1422.

Naples, 03/06/2025 **Signature**