

Giulia Pedrizzetti

WORK EXPERIENCE

 **"La Sapienza" University of Rome** – Rome, Italy

City: Rome | Country: Italy

INSTM research fellowship

[05/2025 – Current]

 **CLES s.r.l.** – Rome, Italy

City: Rome | Country: Italy

Consulting services

[2022 – 2023]

Consulting service for monitoring the research activities of enterprises benefiting from the L.R. 14/2014 calls.



Management of industrial R&D projects collaboration between Sapienza University of Rome and industrial partners

[2021 – Current]

Investigator and reporting delegate

 **"La Sapienza" University of Rome** – Rome, Italy

City: Rome | Country: Italy

PhD Student in Materials Engineering

[01/11/2021 – 30/06/2025]

 **"La Sapienza" University of Rome** – Rome, Italy

City: Rome | Country: Italy

INSTM research scholarship

[01/02/2021 – 31/10/2021]

EDUCATION AND TRAINING

Master's Degree in Nanotechnology Engineering

University of Rome "La Sapienza" [2018 – 2020]

Address: 00184 Roma (Italy) | Final grade: 110 cum laude/110 | Thesis: "Electroless deposition of pure metals for high temperature applications"

Beachelor's Degree in Mechanical Engineering

University of Florence [2014 – 2017]

Address: 50139 Firenze (Italy) | Final grade: 107/110 | Thesis: "Design of a support equipment for the turning of thin-walled components"

Graduation in Scientific High School

Liceo Scientifico Niccolò Copernico [2009 – 2014]

Address: 59100 Prato (Italy) | Final grade: 96/100

Visiting Student at University High School - Irvine (CA)

University High School [2012]

Address: 92612 Irvine , California (United States)

LANGUAGE SKILLS

Mother tongue(s): Italiano

Other language(s):

Inglese

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

Spanish

LISTENING B1 READING B1 WRITING A2

SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Avanzato

Autocad and Solidworks / Microsoft Office package / Matlab/SIMULINK / Autodesk Inventor / AVS Video Editor

Intermedio

EES (Engineering Equation Solver) / Geomagic Studio 2012 / Solidworks / Adobe Lightroom

Base

Machine Learning / C/C++ / Python

CERTIFICATIONS

[Ordine degli Ingegneri della provincia di Roma, 2021]

Qualifying examination - Industrial Engineer

PUBLICATIONS

[2022]

Diffusion aluminide coating modified via electroless nickel plating for Ni-based superalloy protection

V. Genova et al., Surface & Coatings Technology 439 (2022) 128452

[2023]

Interplay between Geometry, Fluid Dynamics, and Structure in the Ventricles of the Human Heart

D. Colli et al, Physical Review Applied, 2023, 19(1), 014006

[2023]

The Effect of Composition and Heat Treatment on Microhardness of Ni-P and Ni-P-nanoZrO₂ Coatings

G. Pedrizzetti et al., Chemical Engineering Transactions, 2023, 100, pp. 433-438

[2023]

Characterization by Dynamic Indentation on Laser-Treated WC-Ti Coatings Deposited via Cold Gas Spray

L. Baiamonte et al., Chemical Engineering Transactions, 2023, 100, pp. 421-426

[2023]

The Effects of Deposition Parameters on the Properties of NiCr Coatings Obtained by Electroless Plating

M. Conti et al., Chemical Engineering Transactions, 2023, 100, pp. 427–432

[2023]

Ni-Fluoropolymers Composite Coatings Obtained via Electroless Plating for Anti-Icing Application

V. Genova et al., Chemical Engineering Transactions, 2023, 101, pp. 211–216

[2023]

Microstructural, mechanical and corrosion characterization of electroless Ni-P composite coatings modified with ZrO₂ reinforcing nanoparticles

G. Pedrizzetti et al., Surface and Coatings Technology, 2023, 473, 129981

[2023]

Medium and High Phosphorous Ni-P Coatings Obtained via an Electroless Approach: Optimization of Solution Formulation and Characterization of Coatings

V. Genova et al., Coatings 2023, 13(9), 1490

[2023]

Ytterbium Disilicate/Monosilicate Multilayer Environmental Barrier Coatings: Influence of Atmospheric Plasma Spray Parameters on Composition and Microstructure

G. Di Iorio et al., Coatings 2023, 13, 1602 .

[2024]

Microstructure of Electroless Ni-P-WC Nanocomposite Coatings with Improved Hardness and Corrosion Resistance

G. Pedrizzetti et al., Coatings 2024, 14, 826.

[2024]

A scenario for heart failure during the filling phase

G. Pedrizzetti et al., Scientific Reports, 14(1), 22760.

[2024]

Effect of Dehydrogenation and Heat Treatments on the Microstructure and Tribological Behavior of Electroless Ni-P Nanocomposite Coatings

G. Pedrizzetti et al., Materials, 17(22), 5657.

Carbon-Phenolic Ablators Modified by Ceramic Nanofilms Deposited via Atomic Layer Deposition (ALD) Technique

R. Bottacchiari et al., Coatings, 14(12), 1551.

[2025]

Influence of microstructural parameters on thermal cycling behavior of DVC-TBC Systems

G. Pedrizzetti et al., Surface and Coatings Technology, 499, 131881

[2025]

Slurry Aluminizing Mechanisms of Nickel-Based Superalloy and Applicability for the Manufacturing of Platinum-Modified Aluminide Coatings

G. Pedrizzetti et al., Coatings 2025, 15, 822.

DRIVING LICENCE

Driving Licence: A2

Driving Licence: B

OTHER APPOINTMENTS

[10/2024 – 05/2025]

Maternity leave

- Laboratory tutoring for the course in “Caratterizzazione di materiali nanostrutturati” (degree program: Ingegneria Chimica e Ingegneria delle Nanotecnologie, Sapienza University of Rome), years 2021-2024;
- Lectures for the course in “Ingegneria delle superfici” (degree program: Ingegneria delle Nanotecnologie, Sapienza University of Rome), years 2022-2024;
- Tutoring for the course in “Ingegneria delle Superfici, dei film sottili e Materiali nanostrutturati” (degree program: Ingegneria delle Nanotecnologie, Sapienza University of Rome), year 2023;
- Lectures for the course in “Surface Engineering” (degree program: Nanotechnology Engineering, Sapienza University of Rome), year 2024.

Teaching Experience

SOFT SKILLS

Soft Skills

- Meticulousness;
- Analysis and problem solving;
- Team-oriented attitude;
- Communication skills;
- Organization and coordination;
- Self-management;
- Flexibility and adaptability.

HOBBIES AND INTERESTS

Other Activities Amateur photographer in sport and motorsport events. Good cooking skills and first level sommelier. Transverse flute player. Body Art and Science International Pilates matwork graduate teacher. Passionate about reading, watersports, skiing and hiking.

f.to GIULIA PEDRIZZETTI

Roma, 06/11/2025