

CURRICULUM VITAE DI ALESSIO PERRONE

Affiliation and official address: University of Salento, Department of Mathematics and Physics, Via Arnesano, CP 193, 73100 Lecce, Italy

Telephone: +39 0832 297501 **Fax:** +39 0832 297505 **Email:** alessio.perrone@unisalento.it

Education: Doctor of Physics, 1974, University of Lecce

Career:

1976/78	Granter, Ministry of Education
1978/1986	Assistant Professor, University of Salento (former University of Lecce)
1986/2000	Associate Professor, University of Salento (former University of Lecce)
2000/now	Full Professor, University of Salento.

Specialization

(i) main field	Materials Science, Laser-matter interaction;
(ii) other fields	Plasma diagnostics by spectroscopic techniques;
(iii) current research	Deposition of nanostructured materials by Pulsed Laser Ablation

Referee of international scientific journals:

Diamond and Related Materials; Applied Surface Science; Sensors & Actuators, B: Chemical; Surface and Coating Technology; Thin Solid Films, Elsevier Science, Amsterdam-Holland. Journal of Physics: Condensed Matter; Journal of Physics D: Applied Physics; Journal of Physics B: Atomic, Molecular & Optical Physics; Semiconductor Science and Technology; Nanotechnology; Journal of Optics, Institute of Physics publishing (IOP), England. Journal of Applied Physics; Applied Physics Letters; Journal of Vacuum Science and Technology A, American Institute of Physics, USA. Applied Physics A: Materials Science & Processing, Springer-Verlag, Germany. Physica Status Solidi (c), Wiley-VCH-Verlag, Germany. Atoms, MDPI.

Evaluator for European Community of European projects:

INTAS - projects of scientific collaboration among European Union countries and former countries of Soviet Union;

STCU - projects of scientific collaboration among European Union countries, Canada, USA and Ukraine;

ISTC - International Science and Technology Center.

National and international scientific collaborations

1) Engineered Photonic Media Lab. NHRF-The National Hellenic Research Foundation Theoretical and Physical Chemistry Institute-TPCI, Patras, Greece (Prof. N. Vainos).

Gas sensors testing by interferometric techniques (Nanophos project).

2) University of Manchester, UK National Graphene Institute, Manchester, UK Alexander Grigorenko (Prof. Alexander Grigorenko)

Synthesis of metallic thin films by pulsed laser ablation deposition (Nato project).

3) Foundation for Research and Technology-Hellas (FO.R.T.H.), Institute of Electronic Structure and Laser (I.E.S.L.), Crete, Greece (Prof. C. Fotakis).

Metallic films produced by ultrashort laser ablation. The present research activity is carried out in Crete in the frame of scientific collaborations financed by the EC.

4) Department of Physics, Chemistry and Biology (IFM), Linköping University, SE-581 83, Linköping, Sweden

Tribologic and ceramic films produced by laser ablation reactive technique.

5) Laboratoire Lasers, Plasmas et Procédés Photoniques, LP3 - Université de la Méditerranée, Marseille, France (Dr. J. Hermann).

Analysis of ablated materials by optical emission spectroscopy. Plasma expansion studies in vacuum and in ambient gas. The present research activity is carried out in Marseille in the frame of scientific collaborations financed by the EC.

6) Department of Electronic Science, University of Delhi South Campus, New Delhi, India (Prof. Avinash Kapoor).

Enhancement in optical absorption of plasmonic solar cells prepared by pulsed laser deposition.

National and international scientific projects

- Project coordinator of the international project: Nato Linkage Grant (HTECH.LG 950429), financed by EC. Title project: “*Laser production of thin films for advanced electronics and optoelectronics devices*”;
- Project coordinator of Alfa project “*Ultra hard thin films deposited by reactive laser ablation*” (ALR/B7-3011/94.04-6.0010.8), financed by EC;

- Italian coordinator of the European project “*Nanostructured Photonic Sensors*” “Nanophos” (N. IST-2001-39112), period (2003-2006). In the frame of the same project, supervisor of the scientific activities carried out in AMRI (Advanced Materials Research Institute), University of Northumbria, Newcastle;
- Italian responsible of the British Council (254-96 CRUI) bilateral agreement between Italy and United Kingdom. Project title: “*Production of amorphous magnetic thin films by laser ablation for sensor applications*”;
- Italian coordinator of the INTAS project (01-0354), “*Spin-Dependent Phenomena in Bulk Crystals and Nanostructures of the Semimagnetic Semiconductors and their Device Applications*”, period (2001-2003);
- Responsible of the scientific and cultural agreement between University of Salento and University of Buenos Aires (SA n. 259 del 27/10/1998);
- Italian responsible of the bilateral agreement “Italia-Argentina” n. 30, cod. 20 F, “*Tribological coatings produced by laser ablation*”, (Scientific and technological cooperation between Italy and Argentine);
- Italian responsible of the bilateral agreement “Italy-Spain” n. IT-383, “*Growth and characterization of ultra hard ceramic films deposited by reactive laser ablation technique*”, (Azioni Integrate), period (2002 – 2003);
- Coordinator of the project “*Deposition of High Quality Diamond-Like Carbon Films by Pulsed Laser Ablation*“, carried out in Crete (Greece) and financed by European Community (Rif. ULF-FORTH AP3107);
- Organizer and co-chair of the workshop: “*Current Trends in Nanostructured Materials*”, Melbourne, Australia, 25-28 March 2002;
- Italian responsible of two Galileo Projects in the frame of scientific cooperation between Italy and France. Period 2003-2004 (*Synthèse de nanoaggrégats de silicium par ablation laser*) and in the period 2006-2007 (*Mise au point d’une technique pour la détection in-situ de nanoaggrégates dans les plasmas*);
- Italian responsible of bilateral agreement in the frame of the scientific and technical cooperation between Italy and Ukraine. The project: “*Semimagnetic semiconductor nanostructures-laser assisted technology, spin dependent phenomena and novel device applications*” has been carried out from 2004 to 2006;
- Italian responsible of the bilateral agreement between Italy and India on the subject: “*Pulsed laser deposition and characterization of doped and un-doped semiconductor metal oxide thin films for gas sensing applications*. Period 2005-2007;
- Local responsible of SPARC (2005-2007) and SPARX (2008-2011) projects financed by National Institute of Nuclear Physics (INFN). In the frame of these projects the research activity concerns the production of metallic thin films by laser ablation deposition technique;
- Coordinator of the project “*Ultra-short pulsed laser deposition of B thin films for its potential application in neutron detection*“, carried out in Crete (Greece) and financed by European Community (Rif. ULF-FORTH_002568, 2019).

Invited speaker in international scientific conferences, Universities and research centers.

Scientific tutor of many PhD students.

Scientific parameters – September 2019

Number of articles: **195 -ISI; 222-Scopus**

Sum of the times cited: **2343-ISI; 2598-Scopus**

Average citation per item: **12,01-ISI; 11.70-Scopus**

h-index: **26-ISI; 27-Scopus**

