

PERSONAL INFORMATION **Lorenzo Pattelli**EDUCATION AND RESEARCH
ACTIVITY

05/2019 – today **Researcher**
INRiM, Strada delle Cacce 91, 10135 Torino
Divisione Metrologia dei materiali innovativi e scienze della vita

12/2016 – 04/2019 **Assegnista di ricerca**
LENS, via Nello Carrara 1, 50019 Sesto Fiorentino

03/2017 **International Doctorate in Atomic and Molecular Photonics**
LENS, via Nello Carrara 1, 50019 Sesto Fiorentino

09/2013 **MSc in Physics and Astrophysics**
Univ. of Florence, P.zza San Marco 4, 50121 Firenze

04/2009 **BSc in Physics**
Univ. of Florence, P.zza San Marco 4, 50121 Firenze

Main research interests

- Optical characterization of disordered media; Theoretical and numerical models for light transport; Development of inverse models for complete retrieval of optical parameters; Diffusion and anomalous diffusion transport regimes
- Radiative transport and rigorous electrodynamics simulation, software development (Monte Carlo method, *T*-matrix method)
- Structural disorder characterization, fabrication and modeling (fractal, heterogeneous, anisotropic, hyperuniform and stealthy hyperuniform, quasi-ordered, quasi-crystalline, sub-random, etc.); 2D and 3D molecular dynamics simulations for particle packing; Biophotonics, bio-inspired photonic materials
- Non-linear optics and sub-ps time domain optical gating applications; measurement techniques in photon-counting regime; wavefront shaping and sensing using digital micro-mirror devices; digital holography applications

Bibliometric indicators Co-author of 18 peer-reviewed publications on international journals, (4+2 as first author+equal contribution, 2 as last author). 4 articles selected as cover stories, 2 frontispieces, 3 featured articles (source: Scopus 13/09/2021). Co-author of 3 proceedings presented by collaborators.

- Total number of citations: 415 by 336 documents
- Hirsch index: 10
- Scopus author ID: 35769861400
- ResearcherID: J-8140-2019
- ORCID: <https://orcid.org/0000-0001-5040-5282>
- Publons (referee activity): <https://publons.com/a/1596746/>
- Google Scholar: <https://scholar.google.it/citations?user=-AWOaXUAAAAJ>