Dinca Paul Pavel, Scientific Researcher III within the Low Plasma Temperature department at the National Institute for Laser, Plasma, and Radiation Physics, hired in 2014. **Main research topics**: development of thin films composed of fusion-related materials using DC Magnetron Sputtering, High Power Impulse Magnetron Sputtering and Thermionic Vacuum Arc techniques, development of beryllium-based co-deposited thin films ((Be-W, Be-C-O, Be-N, W-Al) with well-controlled impurities and nuclear fuel (deuterium) inventory to mimic the chemical composition and physical properties of thin films formed in Joint European Torus, Study of deuterium release behavior and inventory from beryllium-based coatings using Thermal Desorption Spectroscopy, Structural, morphological, mechanical properties and compositional characterization of thin films by XRD, SEM, EDS, AFM, Compositional analysis of thin films with ion beams techniques, particularly RBS and NRA, • Electrical, optical and compositional characterization of plasma to optimize the deposition parameters for fusion related thin films

Personal information:

First name(s)/Surname: Paul-Pavel Dinca **Mobile phone**:+40764340368
Date and place of birth: 13th of January 1990 **E-mail address:** paul.dinca@inflpr.ro
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Education:

• Period • Organization • Title	01.10.2014 – 29.09.2018 Doctoral School of the Faculty of Physics, University of Bucharest **Doctor of Philosophy- ministerial order number 4193 from 29/05/2019,** http://doctorat.fizica.unibuc.ro/Doctorat/Rezumate/Dinca_Paul.pdf
• Period • Organization • Title	01.10.2011 – 30.06.2014 Faculty of Physics, University of Bucharest **Master of Science** (Advanced Applied Physics)
• Period • Organization • Title	01.10.2008 – 30.06.2011 Faculty of Physics, University of Bucharest **Bachelor`s Degree** (Physicist)

Professional experience

03/2021–present: Scientific Researcher 3rd degree, National Institute for Laser, Plasma and Radiation Physics, Bucharest, Romania;

06/2020–03/2021: Scientific researcher, National Institute for Laser, Plasma and Radiation Physics, Bucharest, Romania;

04/2014–06/2020: Scientific Research Assistant, National Institute for Laser, Plasma and Radiation Physics, Bucharest, Romania;

Experience as a researcher in national/international projects

● Autonom Antibacterial Venting and Luminating Modular Green System for Curtain Wall – Valmgreen UEFISCDI 2014-2016; ● Extreme Light Induced Ablation Plasma Jet And Nanopatterning - ELIAN RO-CERN competition; 2014-2016; ● Complex carbon and titanium-based nanocomposites for industrial applications/ CREATIF/ 160/2012/ UEFISCDI 2012-2016; ● Romanian participation at EUROFusion WPJET3 and complementary research / JET3-RO – 2016 ● Romanian participation at EUROFusion WPPFC and complementary research / PFC-RO – 2014-2020; ● Romanian participation at EUROFusion WPJET2 and complementary research / JET2-RO – 2014-2020; ● ITER Service contract: Mechanical Properties and Stability of Co-deposited Beryllium Layers, CONTRACT NUMBER IO/CT/14/4300001065 – 2014; ● Juelich Supply Contract: Supplying 58 beryllium coatings with defined deuterium gas inclusions using a PVD sputtering method called HiPIMS; No2/201; ● Laser-Plasma Acceleration of Particles for Radiation Hardness Testing, LEOPARD 53/2013; ● Romanian Participation at EUROFusion WPPWIE and complementary research WPPWIE-RO 2022 ***Main activities*****:** *scientific research, writing scientific reports, writing and submitting papers for publishing.*

Experience as a project manager:

Neon retention and influence on deuterium inventory in beryllium co-deposited layers with application for nuclear fusion- **NEDBED** PN-III-P1-1.1-PD-2019-1024; 2020-2022 ***Main activities:*** *All aspects related to project management, scientific research, writing and submitting phase reports, writing and submitting papers for publishing, result dissemination.*

Awards:

- **Gold medal** awarded at the "International Fair of Inventions and Practical Ideas INVENT-INVEST 2015
- **Second prize for best paper** award at "International Conference on Fundamentals and Applications of HiPIMS 2018

Disemination of the scientific activity:

- **33- ISI-rated published papers and**; among which 21 papers are related to research on fusion materials in the topic of project proposal with 7 as a main author (6 as a first author, 1 as corresponding author); 1 book published by a national publishing house
- **More than 30 international** conferences and summer school presentation with 4 oral contributions and an invited lecture at 19th International Balkan Workshop on Applied Physics in July 2019
- **Above average research visibility** with 406 citations and a H-index:10 according to Web of Science

Language skills

- English – very good, French – good, Spanish – Basic Level

Additional skills: Competent with Microsoft Office, Linux, Origin, Image J, LabView, SIMRA, SRIM,TRIM