



Guido Giammarinaro

Curriculum Vitae

PERSONAL DATA

Birth: 01 Jan 1993, Mazara del Vallo (TP), Italy
Nationality: Italian
Address: Via Castelvetro 45, Mazara del Vallo (TP), 91026
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EDUCATION AND TRAINING

Nov 2021 – Present **PhD in Smart Industry**

University of Pisa, Italy

Investigation of additive manufacturing techniques and metal/ceramic welding for the production of components for Hall thrusters and other electric thrusters.

Sep 2015 – Jun 2021 **Master's Degree in Aerospace Engineering**

Curriculum: Space Engineering

University of Pisa, Italy

Graduation Grade: 109/110

Thesis: "*Design of a 20 kW Magnetically Shielded Nested Hall Thruster*".

Sep 2011 – Sep 2015 **Bachelor's Degree in Aerospace Engineering**

University of Pisa, Italy

Graduation Grade: 105/110

Thesis: "*Analysis and Optimization of a Thermodynamic Cycle for the Recovery of Energy Stored in the Form of Liquid Air*".

Sep 2006 – Jul 2011 **High School Leaving Qualification in Scientific Studies**

Liceo Scientifico G.P. Ballatore, Mazara del Vallo (TP), Italy

Graduation Grade: 100/100 with Honors

Mar 2009 **Advanced English Course**

Berlitz Language Centre, La Valletta, Malta

WORK EXPERIENCE

Sep 2018 – Mar 2019 **CAD Designer**

PSP Italia s.r.l., Capannori (LU), Italy

Designing of casted wear parts and assemblies for the metallurgical industry.

PROJECTS

- Jan 2023 – Present **CHEOPS – Vey High-Power Building Blocks (Horizon Europe 101082532)**
The project aims to complement ongoing thruster-focused development activities with research and development on the actual future use of VHP Hall thruster systems. The project will use a robust and cost-effective approach to qualification, manufacturability of critical components subject to wear, typically the discharge chamber and cathode.
- Jan 2023 – Present **Optimization of extrusion-based AM for metallic and ceramic parts (University Research Project PRA 2022/23)**
The project objective is to study the feasibility of using material-extrusion additive manufacturing to produce functional components for aerospace and orthodontics.
- Jan 2021 - Present **High-Power Hall-Effect Thruster Prototype with Coaxial Channels (ESA TDP 20.123.01)**
The project is aimed at designing, manufacturing, and testing a 20 kW dual-channel nested Hall thruster, called TANDEM, with a centrally mounted hollow cathode. The thruster is magnetically shielded in order to significantly extend its operative life.

PUBLICATIONS

- Jun 2024 **Effect of 3D Printing Parameters on Mechanical Properties of Sintered Alumina**
G. Giammarinaro; F. Tamburrino; F. Marconcini; A. V. Razionale; F. Paganucci
12th International Joint Conference on Mechanics, Design Engineering and Advanced Manufacturing
- May 2024 **Development of a High-Current Cathode for the CHEOPS VH-BB Project**
C. Guidi; F. Marconcini; G. Giammarinaro; G. Becatti; M. M. Saravia; F. Paganucci; F. Cannelli; U. Cesari
9th Space Propulsion Proceedings
- May 2024 **A 20 kW Magnetically Shielded Nested Hall Thruster: Status and Perspectives of the TANDEM Project**
F. Marconcini; G. Giammarinaro; G. Becatti; M. M. Saravia; C. Guidi; F. Paganucci; F. Dini; F. Scortecchi
9th Space Propulsion Proceedings

- Oct 2023 **Investigation of the Material Extrusion Additive Manufacturing of an Inconel-718 Filament**
 F. Marconcini; F. Tamburrino; G. Giammarinaro; F. Paganucci;
 A. V. Razionale
Euro PM2023 Congress & Exhibition
- Jan 2023 **TANDEM: a High Power, Magnetically Shielded Hall Thruster with a Nested Configuration**
 F. Paganucci; G. Becatti; F. Burgalassi; G. Giammarinaro; F. Marconcini;
 A. Pasini; M. M. Saravia; F. Dini; F. Scortecci; D. Estublier
37th IEPC Proceedings
- Jun 2023 **Recent Advances in Hall Thruster Scaling Methodology**
 F. Marconcini; G. Giammarinaro; M. Andrenucci; G. Becatti;
 F. Paganucci; M. M. Saravia
37th IEPC Proceedings
- May 2023 **A Scaling Methodology for High-power Magnetically Shielded Hall Thrusters**
 G. Giammarinaro; F. Marconcini; G. Becatti; M. M. Saravia;
 M. Andrenucci; F. Paganucci
Journal of Electric Propulsion
<https://doi.org/10.1007/s44205-023-00049-8>
- May 2022 **Electric Propulsion Activities at DICI-UniPi**
 F. Paganucci; G. Becatti; M. M. Saravia; G. Giammarinaro; F. Marconcini;
 S. Camarri; A. V. Razionale
8th Space Propulsion Proceedings
- May 2022 **Development of a High Power, Magnetically Shielded, Dual Channel Hall Thruster in the Framework of the TANDEM Project**
 F. Paganucci; G. Becatti; F. Burgalassi; G. Giammarinaro; F. Marconcini;
 A. Pasini; M. M. Saravia; F. Dini; F. Scortecci; D. Estublier
8th Space Propulsion Proceedings

PERSONAL SKILLS

Mother Tongue: Italian

Other Languages: English – C1+ English for Research Publication and Presentation Purposes (University of Pisa - University Language Centre)

Understanding		Speaking		Writing
Listening	Reading	Interaction	Production	
C1	C1	C1	C1	C1

Digital Skills: Programming: Lua, Pascal, Python, MATLAB
Software Proficiency: Microsoft Office package, MATLAB, FEMM,
ANSYS, COMSOL Multiphysics, SOLIDWORKS, CATIA.