



## Curriculum Vitae

### Personal information

Surname / First name **CERVONE, Angelo**

Address

Telephone

E-mail

Nationality

Date of birth

Gender

### Occupational field **Assistant Professor**

#### Work experience

Dates February 2012 – present

Occupation or position held Assistant Professor

Main activities and responsibilities

- Principal Investigator at TU Delft for the LUMIO mission (Phase 0-A, winner of the ESA Sysnova challenge LUCE – Lunar Cubesats for Exploration), collaboration of 6 universities and companies coordinated by Politecnico di Milano (Italy)
- Principal Investigator at TU Delft for the H2020 project Stardust-R (MSCA-ITN-ETN), collaboration of 22 European partners coordinated by University of Strathclyde (United Kingdom)
- Responsible of research activities on micro-propulsion and advanced propulsion systems for small satellites
- Member of the implementation committee for the "Miniaturization" focal theme of the Aerospace Engineering faculty
- Member of the Board of Examiners, the Library Committee and several selection committees for new Academic Staff positions
- Deputy chair of MSc graduation committees
- Developer and main responsible of the "Propulsion and Power", "Aerospace Design & Systems Engineering Elements", "Spacecraft Technology" courses (2<sup>nd</sup> and 3<sup>rd</sup> year, Aerospace Engineering BSc program) and the "Micropropulsion" course (4<sup>th</sup> year, Aerospace Engineering MSc program).
- Lectures, Exercises, Tutorials and Exams within the "Systems Engineering and Aerospace Design" course (3<sup>rd</sup> year, Aerospace Engineering BSc program), and the "Thermal Rocket Propulsion", "Space Systems Engineering" and "Micro-Satellite Engineering" courses (4<sup>th</sup> year, Aerospace Engineering MSc program).
- Tutor of students projects within the "Test, Analysis and Simulation" course (2<sup>nd</sup> year, Aerospace Engineering BSc program) and the "Design Synthesis Exercise" course (3<sup>rd</sup> year, Aerospace Engineering BSc program).
- Supervisor of 2 successfully promoted PhD candidates, 2 current PhD candidates and MSc theses (current average: 4.7 students per year) on topics related to aerospace propulsion and small satellite missions.
- Successful completion of the TU Delft University Teaching Qualification program, including courses on the development, delivery and assessment of teaching and active learning.
- Successful completion of the TU Delft Personal Development Program for tenure-trackers.
- Actively involved in the development of innovative education, including blended and online courses

Name and address of employer Delft University of Technology, Delft, The Netherlands

Type of business or sector University / Education

Dates	September 2008 – December 2011
Occupation or position held	<u>Project Manager</u>
Main activities and responsibilities	– Responsible for the European Space Agency activities: “Experimental Investigation of Rotordynamic Fluid Forces on Cavitating Helical Inducers” (ref. AO/1-6503/10/NL/SFe); “Dynamic Characterization of Inertially and Thermally Cavitating Turbopumps and Inducers for POGO Suppression” (ref. AO/1-6152/09/NL/NA); “Simulation Models for Solid Rocket Motor Ignition” (ref. AO/1-6051/09/NL/RA); “Investigation of Effects of Ion Thrusters on Solar Array Interconnections and Thermal Finishes”, (collaboration with Galileo Avionica S.p.A., ref. AO/1-5601/08/NL/GLC); “Electromagnetic Interference Caused by Plasma Plumes” (collaboration with OHB-System AG, ref. AO/1-5704/08/NL/GLC).
Name and address of employer	Alta S.p.A., Pisa, Italy
Type of business or sector	Aerospace
Dates	August 2006 – August 2008
Occupation or position held	<u>Foreign Invited Researcher &amp; Post-Doc Fellow</u>
Main activities and responsibilities	– Lectures and seminars to University students (undergraduate, graduate and Ph.D.) on topics related to space rocket turbopumps, cavitation and flow instabilities. – Experimental characterization of the dynamic characteristics of axial inducers, including: transfer matrix, flow instabilities, high-speed optical characterization of cavitation. – Improvement of the design of the LE-7 engine liquid hydrogen inducer for the reduction of the tip vortex cavitation and the unstable phenomena.
Name and address of employer	Osaka University (Department of Engineering Science), Toyonaka, Osaka, Japan
Type of business or sector	University / Education
Dates	January 2004 – July 2006
Occupation or position held	<u>Project Manager</u>
Main activities and responsibilities	– Responsible for the European Space Agency activities: “Scaling of Thermal Cavitation Effects on Cavitation-Induced Instabilities” (contract no. 20081/06/NL/IA); “Self-Pressurized Green Propellant Technology” (contract no. 19584/06/NL/PM); “Green Hydrogen Peroxide Monopropellant Rocket with Advanced Catalytic Beds” (contract no. 18903/05/NL/DC). – Responsible for the activity “FAST2 – Supercavitating Inducer Characterization”, collaboration with AVIO S.p.A. for FAST2 program. – Co-responsible for the activity “Assessment of Chemical Propulsion Systems for Interplanetary Missions”, collaboration with SNECMA on Mars Sample Return Program Phase 1, European Space Agency contract no. ITT/1-4478/03/NL/CP. – Co-responsible for the activity “Test Sperimentali su Airfoil” (Experimental Tests on an Airfoil), collaboration with CIRA (Italian Center for Aerospace Research) for FAST2 program, contract no. 99.0146.0000/0.
Name and address of employer	Alta S.p.A., Pisa, Italy
Type of business or sector	Aerospace
Dates	November 2000 – December 2003
Occupation or position held	<u>Project Engineer</u>
Main activities and responsibilities	– Co-responsible for the Italian Space Agency activities: “Studio di fenomeni di cavitazione in circuiti di alimentazione di razzi a propellente liquido” (Analysis of Cavitation Phenomena in Feeding Systems of Liquid Propellant Rockets, contract no. I/C/015/02/0); “Impianto per prove rotodinamiche di turbopompe cavitanti” (Rotordynamic Test Facility for Cavitating Turbopumps, contract no. I/C/144/00/0).
Name and address of employer	Centrosazio Research Laboratory, Pisa, Italy
Type of business or sector	Aerospace (R&D)

Dates	April 2002 – December 2011
Occupation or position held	<u>Part-Time Lecturer</u>
Main activities and responsibilities	<ul style="list-style-type: none"> <li>– Lectures, Exercises and Exams (in English) within the “Thermal Fluid Sciences” and “Rocket Propulsion” courses.</li> <li>– Lectures, Exercises and Exams (in English) within the “Rocket Propulsion Fundamentals” course for the European Masters Course in Aeronautics and Space Technology (EuMAS).</li> <li>– Lectures, Exercises and Exams (in Italian) within the “Technology of Aeronautical Constructions”, “Design of Aerospace Structures”, “Thermal Fluid Dynamics” and “Rocket Propulsion” courses.</li> <li>– Co-supervisor of Ph.D. students on topics related to cavitation in space rocket turbopumps and green propellants for space rocket applications; supervisor of M.S. and B.S. theses on topics related to space rocket propulsion.</li> </ul>
Name and address of employer	Pisa University (Department of Aerospace Engineering), Pisa, Italy
Type of business or sector	University / Education

## Education and training

Dates	September 2005
Title of qualification awarded	Ph.D., Aerospace Propulsion
Name and type of organisation	University of Pisa, Italy
Dates	October 2000
Title of qualification awarded	M.S. Degree, Aerospace Engineering
Name and type of organisation	University of Pisa, Italy

## Personal skills and competences

Mother tongue **Italian**

Other languages , Self-assessment  
*European level (\*)*

**English**  
**Japanese**  
**Dutch**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Proficient User	C2	Proficient User	C2	Proficient User	C2	Proficient User	C2	Proficient User
A2	Basic User	A2	Basic User	A2	Basic User	A2	Basic User	A1	Basic User
A2	Basic User	A2	Basic User	A2	Basic User	A2	Basic User	A2	Basic User

(\*) [Common European Framework of Reference for Languages](#)

Organisational skills and competences

- Project Management: project planning, preparation of proposals, negotiation with partners, management of budget and resources, project control, risk analysis
- Leadership: responsible of project teams up to 10 members

Technical skills and competences

- Space Systems Engineering
- Micro-Propulsion and Micro/Nano-Satellites
- Small Satellite Deep-Space Exploration Missions
- Safety and Autonoky Systems for Small Satellite Platforms
- Analysis and trade-off of propulsion subsystems for interplanetary missions
- Chemical propulsion: monopropellant, bipropellant and hybrid engines for medium and low thrusts
- "Green" propellants for space rocket applications
- Cavitation and rotordynamics in pumps and hydrofoils
- Turbopumps for liquid propulsion rockets
- Solid Rocket Motors ignition transients
- Electric propulsion for space vehicles and interaction of plasma plumes with vehicle components
- Analog/digital signal acquisition, conditioning, filtering and postprocessing
- 2D and 3D technical drawing for design purposes

Computer skills and competences

- Microsoft Office, MS Project
- LabView
- Matlab, MathCad
- ProEngineer, AutoCad, Ansys

## Additional information

### Review of Proposals and Journal Papers

- Appointed by the Research Executive Agency of the Commission of the European Communities for expert evaluation of proposals and projects in the framework of FP7 and H2020 Space Calls
- Expert evaluator of proposals for the INCT national funding program of the Brazilian government
- Expert evaluator of proposals for the IFD national funding program of the Danish government
- Expert evaluator of proposals for the NCSTE national funding program of the government of Kazakhstan
- Editor for the *International Journal of Aerospace Engineering* and co-editor of the topical collection "Micro-Propulsion Systems and Components for Small Spacecraft—Current Trends, Innovations and Challenges" for the journal *Aerospace*
- Reviewer of papers for several international journals, including: the *AIAA Journal of Propulsion and Power*, the *ASME Journal of Fluids Engineering*, the *Royal Aeronautical Society Journal*, *Acta Astronautica*, *Microsystem Technologies*, *Advances in Space Research*

### Lectures, Memberships and Conference Chairs

- Member of the Space Propulsion Committee of the International Astronautical Federation (since October 2012) and Session Chair for the International Astronautical Congress (since 2013)
- Organizer and chair of the forums "Liquid Rocket Engine Inducers" and "Miniaturized Rotating Machinery" for ISROMAC (International Symposium on Transport Phenomena and Dynamics of Rotating Machinery)
- Session Chair in the framework of the ASME-JSME-KSME Joint Fluids Engineering Conference 2011 in Hamamatsu, Japan (July 2011)
- Regular session chair for various sessions of the biennial ESA Space Propulsion Conference
- Invited lecture at NASA Marshall Space Flight Center (Huntsville, AL, United States) on "*Space Rocket Turbopumps, Cavitation and Rotordynamics Research at Alta S.p.A.*" (July 2010)
- Co-chairman of the workshop "*Inducers: Present Issues and Future Orientation*" in the framework of the 6th International Symposium on Pumping Machinery at the ASME Fluids Engineering Division Summer Meeting 2009 in Vail, CO, United States (August 2009)
- Invited lectures at Aerojet (Sacramento, CA, United States) and Rocketdyne (Los Angeles, CA, United States) on "*Cavitation and Hydrodynamics Research at Alta S.p.A. and Pisa University for the Characterization of Flow Instabilities in Axial Inducers*" (April 2009)
- Invited lecture at JAXA Kakuda Space Center (Japan) on "*Recent Experimental Activities on Cavitation and Flow Instabilities at University of Pisa*" (September 2006)
- Invited talk at the yearly directors' seminar of IASE-SUPAERO (France) on "*Management of Transversal Engineering Education Projects at Delft University of Technology*" (January 2019)

### Publications

- 5 book chapter contributions, 33 papers on international journals and 94 papers on conference proceedings (see attached list)

## Annexes

List of Publications

## List of Publications

### BOOKS AND BOOK CHAPTER CONTRIBUTIONS

- S. Speretta, A. Cervone, P. Sundaramoorthy, R. Noomen, S. Mestry, A. Cipriano, F. Topputo, J. Biggs, P. Di Lizia, M. Massari, K. Mani, D. Dei Tos, S. Ceccherini, V. Franzese, A. Ivanov, D. Labate, L. Tommasi, A. Jochemsen, J. Gallis, R. Furfaro, V. Reddy, J. Vennekens, R. Walker, 2019, “LUMIO: an Autonomous CubeSat for Lunar Exploration”, in *Space Operations: Inspiring Humankind's Future*, Springer nature Switzerland AG, doi: 10.1007/978-3-030-11536-4\_6
- L. d'Agostino, L. Torre, A. Cervone, G. Pace, D. Valentini, A. Pasini, 2017, “An Introduction to Cavitation in Inducers and Turbopumps”, in *Cavitation Instabilities and Rotordynamic Effects in Turbopumps and Hydroturbines* (pp. 1-33), Springer International Publishing, doi: 10.1007/978-3-319-49719-8\_1
- L. d'Agostino, A. Cervone, L. Torre, G. Pace, D. Valentini, A. Pasini, 2017, “An Introduction to Flow-Induced Instabilities in Rocket Engine Inducers and Turbopumps”, in *Cavitation Instabilities and Rotordynamic Effects in Turbopumps and Hydroturbines* (pp. 65-86), Springer International Publishing, doi: 10.1007/978-3-319-49719-8\_3
- L. d'Agostino, D. Valentini, A. Pasini, L. Torre, G. Pace, A. Cervone, 2017, “On the Preliminary Design and Performance Prediction of Centrifugal Turbopumps - Part 1”, in *Cavitation Instabilities and Rotordynamic Effects in Turbopumps and Hydroturbines* (pp. 137-156), Springer International Publishing, doi: 10.1007/978-3-319-49719-8\_6
- L. d'Agostino, D. Valentini, A. Pasini, L. Torre, G. Pace, A. Cervone, 2017, “On the Preliminary Design and Performance Prediction of Centrifugal Turbopumps - Part 2”, in *Cavitation Instabilities and Rotordynamic Effects in Turbopumps and Hydroturbines* (pp. 157-178), Springer International Publishing, doi: 10.1007/978-3-319-49719-8\_7

### PUBLICATIONS ON INTERNATIONAL JOURNALS

- M. de Athayde Costa e Silva, M. Shan, A. Cervone, E. Gill, “Fuzzy Control Allocation of Microthrusters for Space Debris Removal Using CubeSats”, *Engineering Applications of Artificial Intelligence*, 2019, 81, pp. 145-156, doi: 10.1016/j.engappai.2019.02.008
- F. Leverone, A. Cervone, E. Gill, “Cost Analysis of Solar Thermal Propulsion Systems for Microsatellite Applications”, accepted for publication in *Acta Astronautica*, doi: 10.1016/j.actaastro.2018.11.025
- M. de Athayde Costa e Silva, S. Silvestrini, D.C. Guerrieri, A. Cervone, E. Gill, “A Comprehensive Model for Control of Vaporizing Liquid Microthrusters”, *IEEE Transactions on Control Systems Technology*, 2018, 99, pp. 1-8, doi: 10.1109/TCST.2018.2865789
- D.C. Guerrieri, M. de Athayde Costa e Silva, A. Cervone, E. Gill, “An Analytical Model for Characterizing the Thrust Performance of a Low Pressure Micro-Resistojet”, *Acta Astronautica*, Vol. 152, November 2018, pp. 719-726, doi: 10.1016/j.actaastro.2018.09.008
- J. Damba, P. Argente, P.E. Maldonado, A. Cervone, J.L. Domenech Garret, L. Conde, “Multiprobe Characterization of Plasma Flows for Space Propulsion”, *Journal of Physics: Conference Series*, Vol. 958, No. 1, February 2018, doi: 10.1088/1742-6596/958/1/012002
- D.C. Guerrieri, M. de Athayde Costa e Silva, H. van Zeijl, A. Cervone, E. Gill, “Fabrication and Characterization of Low-Pressure Micro-Resistojets with Integrated Heater and Temperature Measurement”, *Journal of Micromechanics and Microengineering*, 27.12 (2017): 125005, doi: 10.1088/1361-6439/aa90fb
- M. de Athayde Costa e Silva, D.C. Guerrieri, A. Cervone, E. Gill, “A Review of MEMS Micropropulsion Technologies for CubeSats and PocketQubes”, *Acta Astronautica*, Vol. 143, February 2018, pp. 234-243, doi: 10.1016/j.actaastro.2017.11.049
- M. de Athayde Costa e Silva, D.C. Guerrieri, H. van Zeijl, A. Cervone, E. Gill, “Vaporizing Liquid Microthrusters with Integrated Heaters and Temperature Measurement”, *Sensors & Actuators: A. Physical*, Vol. 265, October 2017, pp. 261-274, doi: 10.1016/j.sna.2017.07.032
- G. Romanelli, A. Mignone, A. Cervone, “Pulsed Fusion Space Propulsion: Computational Magneto-Hydro Dynamics of a Multi-Coil Parabolic Reaction Chamber”, *Acta Astronautica*, Vol. 139, October 2017, pp. 528-544, doi: 10.1016/j.actaastro.2017.07.045
- D.C. Guerrieri, M. de Athayde Costa e Silva, A. Cervone, E. Gill, “Selection and Characterization of Green Propellants for Micro-Resistojets”, *ASME Journal of Heat Transfer*, Vol. 139, Is. 10, October 2017, doi: 10.1115/1.4036619
- A. Cervone, B. Zandbergen, D.C. Guerrieri, M. de Athayde Costa e Silva, I. Krusharev, H. van Zeijl, “Green Micro-Resistojet Research at Delft University of Technology: New Options for Cubesat Propulsion”, *CEAS Space Journal*, Vol. 9, Is. 1, January 2017, pp. 111-125, doi: 10.1007/s12567-016-0135-3
- K. Mani, A. Cervone, J.P. Hickey, “Turbulence Modelling of Cavitating Flows in Liquid Rocket Turbopumps”, *ASME Journal of Fluids Engineering*, Vol. 139, Is. 1, January 2017, doi: 10.1115/1.4034096
- A. Cervone, J.A. Melkert, L.F.M. Mebus, G.N. Saunders-Smits, “Push or Pull Students into Blended Education: a Case Study at Delft University of Technology”, *International Journal of Engineering Education*, Vol. 32, no. 5(A), 2016, pp. 1911-1921
- D.C. Guerrieri, A. Cervone, E. Gill, “Analysis of Non-Isothermal Rarefied Gas Flow in Diverging Microchannels for Low Pressure Micro-Resistojets”, *ASME Journal of Heat Transfer*, Vol. 138, Is. 11, November 2016, doi: 10.1115/1.4033955
- A. Fraters, A. Cervone, “Experimental Characterization of Combustion Instabilities in High Mass Flux Hybrid Rocket Engines”, *AIAA Journal of Propulsion and Power*, Vol. 32, No. 4, Jul-Aug 2016, pp. 958-966, doi: 10.2514/1.B35485
- A. Cervone, A. Mancas, B. Zandbergen, “Conceptual Design of a Low-Pressure Micro-Resistojet Based on a Sublimating Solid Propellant”, *Acta Astronautica*, Vol. 108, March-April 2015, pp. 30-39, doi: 10.1016/j.actaastro.2014.12.003
- H. Olthof, A. Cervone, “Validation of a ballistic simulation tool for the characterisation of solid propellants”, *Int. J. Space Science and Engineering*, Vol. 1, No. 3, 2013, pp. 268-289
- A. Pasini, L. Torre, A. Cervone, L. d'Agostino, “Continuous Spectrum of the Rotordynamic Forces on a Four Bladed Inducer”, *ASME Journal of Fluids Engineering*, Vol. 133, Is. 12, December 2011

- L. Torre, A. Cervone, A. Pasini, L. d'Agostino, "Experimental Characterization of Thermal Cavitation Effects on Space Rocket Axial Inducers", ASME Journal of Fluids Engineering, Vol. 133, Is. 11, November 2011
- L. Torre, A. Pasini, A. Cervone, L. d'Agostino, "Experimental Characterization of the Rotordynamic Forces on Space Rocket Axial Inducers", ASME Journal of Fluids Engineering, Vol. 133, Is. 10, October 2011
- L. Torre, A. Pasini, A. Cervone, G. Pace, P. Miloro, L. d'Agostino, "Effect of Tip Clearance on the Performance of a Three-Bladed Axial Inducer", AIAA Journal of Propulsion and Power, Vol. 27, No. 4, Jul-Aug 2011, pp. 890-898
- A. Pasini, L. Torre, L. Romeo, A. Cervone, L. d'Agostino, "Performance Characterization of Pellet Catalytic Beds for Hydrogen Peroxide Monopropellant Rockets", AIAA Journal of Propulsion and Power, Vol. 27, No. 2, Mar-Apr 2011, pp. 428-436
- A. Pasini, L. Torre, L. Romeo, A. Cervone, L. d'Agostino, "Reduced Order Model for H<sub>2</sub>O<sub>2</sub> Catalytic Reactor Performance Analysis", AIAA Journal of Propulsion and Power, Vol. 26, No. 3, May-Jun 2010, pp. 446-453
- L. Torre, A. Pasini, L. Romeo, A. Cervone, L. d'Agostino, "Performance of a Monopropellant Thruster Prototype Using Advanced Hydrogen Peroxide Catalytic Beds", AIAA Journal of Propulsion and Power, Vol. 25, No. 6, Nov-Dec 2009, pp. 1291-1299
- A. Cervone, Y. Tsujimoto, Y. Kawata, "Evaluation of the Dynamic Transfer Matrix of Cavitating Inducers by Means of a Simplified Lumped-Parameter Model", ASME Journal of Fluids Engineering, Vol. 131, Is. 4, April 2009
- L. d'Agostino, L. Torre, A. Pasini, A. Cervone, "On the Preliminary Design and Noncavitating Performance of Tapered Axial Inducers", ASME Journal of Fluids Engineering, Vol. 130, Is. 11, November 2008
- T. Watanabe, D. Kang, A. Cervone, Y. Kawata, Y. Tsujimoto, "Choked Surge in a Cavitating Turbopump Inducer", International Journal of Fluid Machinery and Systems, Vol. 1, No. 1, Oct-Dec 2008, pp. 64-75
- A. Cervone, "Researching on Space Rocket Turbopumps in Japan: a Two-Years Post-Doc Fellowship at Osaka University", Turbomachinery Society of Japan Journal, Vol. 36, No. 7, 2008, pp. 438-441
- A. Pasini, L. Torre, L. Romeo, A. Cervone, L. d'Agostino, "Testing and Characterization of a Hydrogen Peroxide Monopropellant Thruster", AIAA Journal of Propulsion and Power, Vol. 24, No. 3, May-Jun 2008, pp. 507-515
- A. Cervone, C. Bramanti, L. Torre, D. Fotino, L. d'Agostino, "Setup of a High-Speed Optical System for the Characterization of Flow Instabilities Generated by Cavitation", ASME Journal of Fluids Engineering, Vol. 129, Is. 7, July 2007, pp. 877-885
- A. Cervone, L. Torre, C. Bramanti, E. Rapposelli, L. d'Agostino, "Experimental Characterization of Cavitation Instabilities in a Two-Bladed Axial Inducer", AIAA Journal of Propulsion and Power, Vol. 22, No. 6, Nov-Dec 2006, pp. 1389-1395
- A. Cervone, C. Bramanti, E. Rapposelli, L. d'Agostino, "Thermal Cavitation Experiments on a NACA 0015 Hydrofoil", ASME Journal of Fluids Engineering, Vol. 128, Is. 2, March 2006, pp. 326-331
- A. Cervone, R. Testa, C. Bramanti, E. Rapposelli, L. d'Agostino, "Thermal Effects on Cavitation Instabilities in Helical Inducers", AIAA Journal of Propulsion and Power, Vol. 21, No. 5, Sep-Oct 2005, pp. 893-899

#### PUBLICATIONS ON CONFERENCE PROCEEDINGS

- V. Pallichadath, L. Turmaine, M. de Athayde Costa e Silva, D.C. Guerrieri, M.S. Uludag, B. Zandbergen, A. Cervone, "In-Orbit Micro-Propulsion Demonstrator for Pico-Satellite Applications", IAF 69<sup>th</sup> International Astronautical Congress, Bremen, Germany, October 2018
- P. Sundaramoorthy, F. Topputo, M. Massari, J. Biggs, P. Di Lizia, D. Dei Tos, K. Mani, S. Ceccherini, V. Franzese, A. Cervone, S. Speretta, S. Mestry, R. Noomen, A. Ivanov, D. Labate, A. Jochemsen, R. Furfaro, V. Reddy, K. Jacquinet, R. Walker, J. Vennekens, A. Cipriano, D. Koschny, S. Pepper, M. van de Poel, "System Design of LUMIO: a CubeSat at Earth-Moon L2 for Observing Lunar Meteoroid Impacts", IAF 69<sup>th</sup> International Astronautical Congress, Bremen, Germany, October 2018
- F. Topputo, M. Massari, J. Biggs, P. Di Lizia, D. Dei Tos, K. Mani, S. Ceccherini, V. Franzese, A. Cervone, P. Sundaramoorthy, S. Speretta, S. Mestry, R. Noomen, A. Ivanov, D. Labate, A. Jochemsen, R. Furfaro, V. Reddy, K. Jacquinet, R. Walker, J. Vennekens, A. Cipriano, D. Koschny, "LUMIO: Characterizing Lunar Meteoroid Impacts with a CubeSat", IAF 69<sup>th</sup> International Astronautical Congress, Bremen, Germany, October 2018
- K. Mani, F. Topputo, A. Cervone, "Chemical Propulsion System Design for 16U Interplanetary CubeSat", IAF 69<sup>th</sup> International Astronautical Congress, Bremen, Germany, October 2018
- S. Speretta, A. Cervone, P. Sundaramoorthy, R. Noomen, S. Mestry, A. Cipriano, F. Topputo, J. Biggs, P. Di Lizia, M. Massari, K. Mani, D. Dei Tos, S. Ceccherini, V. Franzese, A. Ivanov, D. Labate, L. Tommasi, A. Jochemsen, J. Gallis, R. Furfaro, V. Reddy, J. Vennekens, R. Walker, "LUMIO: Achieving Autonomous Operations for Lunar Exploration with a CubeSat", SpaceOps - 15<sup>th</sup> International Conference on Space Operations, Marseille, France, May 2018
- F. Topputo, M. Massari, J. Biggs, P. Di Lizia, D. Dei Tos, K. Mani, S. Ceccherini, V. Franzese, A. Cervone, P. Sundaramoorthy, S. Speretta, S. Mestry, R. Noomen, A. Ivanov, D. Labate, A. Jochemsen, R. Furfaro, V. Reddy, K. Jacquinet, R. Walker, J. Vennekens, A. Cipriano, "LUMIO: a CubeSat at Earth-Moon L2", The 4S Symposium 2018, Sorrento, Italy, May 2018
- M. de Athayde Costa e Silva, D.C. Guerrieri, A. Cervone, E. Gill, "Topology Optimization of Heating Chamber of Vaporizing Liquid Microthrusters", ESA Space Propulsion 2018 Conference, Seville, Spain, May 2018
- K. Mani, F. Topputo, A. Cervone, "Dual Chemical-Electric Propulsion Systems Design for Interplanetary CubeSats", ESA Space Propulsion 2018 Conference, Seville, Spain, May 2018
- V. Pallichadath, S. Radu, M. de Athayde Costa e Silva, D.C. Guerrieri, A. Cervone, "Integration and Miniaturization Challenges in the Design of Micro-Propulsion Systems for Picosatellite Platforms", ESA Space Propulsion 2018 Conference, Seville, Spain, May 2018
- D.C. Guerrieri, M. de Athayde Costa e Silva, A. Cervone, E. Gill, "Optimum Design of a Low Pressure Micro-Resistojet Applied to Nano- and Pico-Satellites", ESA Space Propulsion 2018 Conference, Seville, Spain, May 2018
- V. Pallichadath, S. Silvestrini, M. de Athayde Costa e Silva, D. Maxence, D.C. Guerrieri, S. Mestry, T. Perez Soriano, M. Bacaro, H. van Zeijl, B. Zandbergen, A. Cervone, "MEMS Based Micro-Propulsion System for CubeSats and PocketQubes", IAF 68<sup>th</sup> International Astronautical Congress, Adelaide, Australia, September 2017

- F. Leverone, A. Cervone, M. Pini, E. Gill, P. Colonna, “*Feasibility of an Integrated Solar Thermal Power and Propulsion System for Small Satellites*”, IAF 68<sup>th</sup> International Astronautical Congress, Adelaide, Australia, September 2017
- S. Silvestrini, M. de Athayde Costa e Silva, A. Cervone, “*Closed-Loop Thrust Control for Micropropulsion Systems*”, IAF 68<sup>th</sup> International Astronautical Congress, Adelaide, Australia, September 2017
- D. Maxence, D.C. Guerrieri, A. Cervone, “*Preliminary Results of a Sublimating Propellant Tank for Dedicated Micropropulsion System*”, IAF 68<sup>th</sup> International Astronautical Congress, Adelaide, Australia, September 2017
- S. Leveratto, M. van de Poel, M. de Athayde Costa e Silva, D.C. Guerrieri, A. Cervone, “*Characterisation of a Thrust Stand to Assess Micro-Thruster Performance*”, IAF 68<sup>th</sup> International Astronautical Congress, Adelaide, Australia, September 2017
- I. Granero, E. Jansen, T. van Wees, A. Cervone, B. Zandbergen, “*Application of Design Trades to the Development of the Propellant Tank for a Water Micro-Resistojet*”, IAF 68<sup>th</sup> International Astronautical Congress, Adelaide, Australia, September 2017
- J. Damba, P. Argente, P.E. Maldonado, A. Cervone, J.L. Domenech Garret, L. Conde, “*Multiprobe Characterization of Plasma Flows for Space Propulsion*”, 12<sup>th</sup> International Workshop on Electric Probes in Magnetized Plasmas, Naklo, Slovenia, September 2017
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