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## Curriculum Vitae Antonella Ingenito

"Ai fini della pubblicazione"

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**Curriculum Vitae**

Place -----  
Date 8/11/2019

**Part I – General Information**

Omessi in modo da garantire la conformità del Curriculum Vitae a quanto prescritto dall’art. 4 del Codice in materia di protezione dei dati personali e dall’art. 26 del D. Lgs. 14 marzo 2013, n. 33, al fine della pubblicazione, e contrassegnata per la destinazione “ai fini della pubblicazione”

**Part II – Education**

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	2001	University of Rome La Sapienza	Master Degree in Mechanical Engineering
Pre-doctorate training	2003	University of Rome La Sapienza	Attendance at the course “Partial differential equations” by prof. Strukmayer
Pre-doctorate training	2003	University of Rome La Sapienza	Attendance at the “Monte Carlo numerical method and applications” course by Dr Valery D. Perminov
Pre-doctorate training	2004	Von Karman Institute	Attendance at the “Introduction to Turbulence Modelling” course
Pre-doctorate training	2005	LCD laboratory (Combustion and Detonation Laboratory), CNRS (Poitiers, France)	Attendance at the LCD laboratory lectures and courses on combustion
PhD	2006	University of Rome La Sapienza	PhD in “Theoretical and Applied Mechanics”, title "Supersonic combustion with hydrocarbons reforming products for airbreathing applications" in collaboration with CIRA. Advisors: Prof. C. Bruno.
Post-doctorate training	2007	Von Karman Institute	Attendance at the “Advances in Propulsion Technology for High-Speed Aircraft (RTO)” course

### Part III – Appointments

#### IIIA – Academic Appointments

Start	End	Institution	Position
2/10/2017	1/03/2021	“Scuola di Ingegneria Aerospaziale” dell’Università di Roma La Sapienza	RTD A stipulato ai sensi dell’art. 24, comma 3, lett. a) della legge 30 dicembre 2010, n. 240, titolo: “Sistemi di lancio innovativi dedicati ai microsatelliti”
2014	2017	Università Italo Francese/ <i>Université Franco Italienne</i> (UIF/UFi)	Co-relator of a French-Italy PhD sponsored by the VINCI program
1/02/2013	30/06/2016	Department of Mechanical and Aerospace Engineering of the University of Rome “La Sapienza”	Assegnista di Ricerca, titolo “Simulazioni numeriche di motori LOx/HC”; stipulato ai sensi dell’art. 22, della legge 30 dicembre 2010, n. 240 – SSD ING-IND/07– propulsione aerospaziale
2013	2014	University of Bruxelles	Reviewer of PhD theses
1/02/2010	31/01/2013	Department of Mechanical and Aerospace Engineering of the University of Rome “La Sapienza”	Ricercatore a Tempo Determinato stipulato ai sensi dell’art. 1, comma 14, della legge 4 novembre 2005, n. 230 – SSD ING/IND-07dal titolo: “Modellistica della combustione in regime supersonico e dimensionamento di veicoli ipersonici airbreathing”.
2010	2013	St. Sir Ecole Spéciale Militaire de Saint-Cyr	Scientific relator of 4 Master Degree Theses students in Aerospace Propulsion
2007	2016	University of Rome La Sapienza	Scientific relator/co-relator of more than 80 Master degree students in Aerospace Propulsion
1/02/2006	31/01/2010	Department of Mechanical and Aerospace Engineering of the University of Rome “La Sapienza”	Assegnista di ricerca, titolo “Simulazioni numeriche di combustione supersonica per aria/idrogeno e aria/prodotti di reforming”, stipulato ai sensi dell’art. 51, comma 6, della legge 27/12/1997, n.449 e successive modificazioni, settore scientifico-disciplinare ING-IND/07 – propulsione aerospaziale

**IIIB – Other Appointments**

Start	End	Institution	Position
2011	2019	ISCRA CINECA	Scientific Evaluator of the ISCRA proposals
2011	2012	French National Research Agency	Scientific Evaluator of the "BlueSky and Young Researchers Programmes"

**Part IV – Teaching experience**

Year	Institution	Course
Since 2018	“Aerospace Engineering School” of the University of Rome “La Sapienza”	Teacher of the master degree course “Hybrid propulsion and new launch systems” (6 credits), in english
Since 2018	“Aerospace Engineering School” of the University of Rome “La Sapienza”	Teacher of the master degree course “Low Thrust Propulsion” (6 credits), in english
2015-2018	“Aerospace Engineering School” of the University of Rome “La Sapienza”	Teacher of the master degree course “Hybrid propulsion and new launch systems” (9 credits), in english
2013-2014	Civil and Industrial Engineering of the University of Rome “La Sapienza”	Tutor of the bachelor degree course “Space propulsion” within the course of Aerospace propulsion (8 credits)
2012	“Aerospace Engineering School” of the University of Rome “La Sapienza”	Teacher of the master degree course “Astronautic propulsion” (8 credits)
2007-2011	“Aerospace Engineering School” of the University of Rome “La Sapienza”	Teacher of the master degree course “Liquid rocket propulsion” (9 credits)
2007	Polytechnic of Turin (University of Technology)	Teacher of the course “SPACE EXPLORATION AND DEVELOPMENT SYSTEMS (SEEDS)” for PhD students, in english
2006	“Aerospace Engineering School” of the University of Rome “La Sapienza”	Teacher of the master degree course “Airbreathing propulsion” (6 credits)
Year	Institution	Lecture
2007	ENEA (Ente Nazionale Energia e Ambiente)	Lectures in supersonic combustion for researchers
2005-2006	“Aerospace Engineering School” of the University of Rome “La Sapienza”	Lectures in “Combustion for propulsive systems” for master degree students

**Part V - Society memberships, Awards and Honors****Society memberships**

Year	Title
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Since 2018	Member of the “Aerospace Commission” of Ordine degli Ingegneri di Roma.
Since 2015	Member of the “Hypersonic Vehicles” working group sponsored by CESMA (CENTRO STUDI MILITARI AERONAUTICI GIULIO DOUHET)
Since 2011	Member of the AIAA HSABP Technical Committee (High Speed Air Breathing Propulsion)
Since 2011	Member of the Hypersonic Technologies and Aerospace Planes (HyTASP) Technical Committee
2011-2014	Member of the IAF “Space Propulsion” Technical Committee

### Awards and Honors

2019	She was invited to write a manuscript for the Special Issue "Scramjet and Ramjet Combustion" in Energies journal
Since 2011	Reviewer for the following International/Elsevier Journals: Combustion Science and Technology, Combustion and Flame, Acta Astronautica, Aerospace Science and Technologies.
Since 2011	Reviewer for the AIAA meetings and the Proceedings of the “Combustion Institute”
2011	Her research activity published on the “HighSpeed Times -Newsletter of the AIAA High Speed Air Breathing Propulsion Technical Committee”
2011	She was invited to contribute at the Invited Session of “High Order Numerical Schemes Simulations” at the 47th JPC conference
2009	She was invited to write a paper for the Special Section of “Advanced Techniques for Scramjet Simulation” of AIAA J (published in March 2010)
Since 2006	<p>Technical Speaker at more than 20 meetings organized by AIAA, EUCASS and ISABE</p> <p>Session Chair and Technical speaker at 15th AIAA International Space Planes and Hypersonic Systems and Technologies Conference; Dayton, OH; United States; 28 April 2008 through 1 May 2008</p> <p>Session Chair and Technical speaker at 44th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit; Hartford, CT; United States; 21 July 2008 through 23 July 2008</p> <p>Session Chair and Technical Speaker at 45th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit; Denver, CO; United States; 2 August 2009 through 5 August 2009</p> <p>Session Chair and Technical Speaker at "16th AIAA/DLR/DGLR International Space Planes and Hypersonic Systems and Technologies Conference"; Bremen; Germany; 19 October 2009 through 22 October 2009</p> <p>Session Chair and Technical Speaker at " 46thAIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit; Nashville, TN; United States; 25 July 2010 through 28 July 2010</p> <p>Session Chair and Technical Speaker at 47th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit 2011"; San Diego, CA; United States; 31 July 2011 through 3 August 2011</p>

2005	She was awarded the grant by the Scientific France Embassy to work and study at the LCD laboratory (Combustion and Detonation Laboratory), CNRS (Poitiers, France) on subsonic/supersonic combustion in homogeneous and heterogeneous phase.
2005	Her work was published on <a href="http://www.flightglobal.com/news/articles/silanes-investigated-as-hydrogen-replacement-198660/">http://www.flightglobal.com/news/articles/silanes-investigated-as-hydrogen-replacement-198660/</a>
2005	Her work was published on <a href="http://www.flightglobal.com/news/articles/scramjet-modelling-tools-must-change-200121/">http://www.flightglobal.com/news/articles/scramjet-modelling-tools-must-change-200121/</a>

#### ORGANISATION OF SCIENTIFIC MEETINGS

14-31/10/2019	She organized the Event “Spazio allo Spazio” aimed at students of all ages from elementary school to university at the School of Aerospace Engineering of La Sapienza
10/2019	She organized and chaired the Seminar “Accesso e Sfruttamento dello Spazio Stratosferico: gli HAPS” with the Order of Engineers of Rome at the School of Aerospace Engineering of La Sapienza
10/2018	She organized and chaired the Seminar “Accesso a Orbita bassa” with the Order of Engineers of Rome at the School of Aerospace Engineering of La Sapienza
2008-2019	She promoted and managed 8 seminars for students and researchers at the School of Aerospace Engineering of La Sapienza dealing with Space propulsion: 1. Prof. Vladimir Bazarov, Moscow Aviation Institute (State Technical University), “Comparative Analysis and Selection of injector conception for spacecraft soft lunar landing descent variable Thrust Engine”; 2. Giuseppe Corrao, Eng. Technological Innovation Telespazio SpA, Finmeccanica/Thales company, “Utilizzo del tool STK per l'analisi delle missioni spaziali”; 3. Gammarrata Antonio, Manager R&D and Product Policy Directorate, Thales Alenia Space, “Ricerca e Innovazione nell'industria Spaziale: "Infrastrutture e Trasporto Spaziale”; 4. Yuriy Shmaliy, Prof. Department of Electronics, FIMEE, Guanajuato University, “Optimal and Unbiased FIR Filtering of Discrete-Time State-Space Models”; 5. Antonio Accettura, Program Manager, Ariane 5 Program Department, Avio – Colleferro, “In-Situ Propulsion - technologies and perspectives”; 6. Antonio Accettura, Program Manager, “Satellites Market Survey and Trend”; 7. Antonio Accettura, Program Manager, “Innovative Technologies to enable new missions”; 8. Guillermo Paniagua, Purdue University, “Development of novel turbine designs at Purdue University”.

#### Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

##### Coordinator/Principal investigator

Year	Title	Program	Description/Grant Value
2019	Spazio allo Spazio	Regional program issued by Regione Lazio	Scientific dissemination program for students from elementary schools to university

2018	Numerical and experimental investigation of biopolymers-based hybrid propulsion	National program "Ricerche Universitarie" issued by University of Rome "La Sapienza", prot. RP1181643632B178	Project dealing with numerical and experimental investigation of different propellants for hybrid propulsion
2017	Casting of solid propellant within rocket motors: safe and high efficiency methodology	Grant issued by GAUSS Srl	Project dealing with theoretical and experimental investigation of solid propellant manufacturing for solid and hybrid propulsion
2016	Analysis and sizing of aerospace propulsion systems	Grant issued by GAUSS Srl	Project dealing with sizing of hybrid rockets and investigating performance for different fuel/oxidizer combinations and operative conditions
2013	THESEUS, Thrusters Evolution for Space Exploration and Upper Stages	National program issued by AVIO SpA	Project investigating the combustion efficiency of different LCH4/O2 thrusters configurations and operative conditions by means of RANS/LES simulations
2012	FLAMELESS OXIDATION and MILD combustion for NOx reduction strategy	National program FARI, prot. C26I12S5Z7 issued by University of Rome "La Sapienza"	Investigation of the feasibility of MILD combustion chambers with high efficiency and low emissions by means of chemical and numerical analysis
2011	ELECTRO-CHEMICAL THRUSTERS FOR SPACE PROPULSION	National program "Ricerche Universitarie" issued by University of Rome "La Sapienza", prot. C26A11R8JJ	Investigation of innovative hybrid propulsion system for space applications
2011	"Physics of Compressible Reactive Turbulence"	ISCRA program issued by CINECA	Numerical simulations of compressible reacting flows (RANS/LES)
2010	Physics and Modelling of Mixing and Combustion in Supersonic Flows	National program "Progetti di Ricerca Universitari" issued by University of Rome "La Sapienza", prot. C26I107PR8	Investigation of SGS models for turbulent combustion in compressible flows

## First Investigator

2014-2015	RAMJET 2014	Grant issued by AVIO SpA	Project dealing with sizing of ramjet engines and investigating performance for different operative conditions and mission requirements
2008-2014	LAPCAT II (Long-Term Advanced Propulsion Concepts and Technologies II)	International program issued by EU within the 7th Framework Programme (FP7) Theme Transport, Contract no.: ACP7-GA-2008-211485.	Project investigating high-speed transport in particular NOx reduction strategies, ozone depletion, nozzle to tail vehicle sizing, RANS/LES of the European MR2 scramjet configuration
2007-2009	Collaborative Research on Hypersonic Airbreathing Propulsion System	Bilateral Special program between Korea and Italy issued by the Italian Ministry of Foreign Affairs.	Project dealing with LES simulations of the HyShot II scramjet engine
2007-2008	PRIN National program	National program issued by Italian Ministry of Instruction	Project investigating the feasibility of Microcombustors for Microturbine and Microthrusters through CFD simulations and theoretical scaling laws
2005 - 2008	LAPCAT Long-Term Advanced Propulsion concepts and Technologies	International program issued by European Community within the Sixth Framework Programme (FP6) Priority Programme 1.4 Aeronautics and Space	Project investigating scramjet engines through LES simulations of the HyShot II and the NASA Langley scramjet configurations; analysis of different fuels; investigation of fuel cracking and reforming for scramjet applications
2005-2010	GDR-E (European research group) at "Energy and Safety of Hydrogen".	International program issued by European Community within the Sixth Framework Programme;	Project investigating hydrogen as fuel for aerospace applications
2005	LCD laboratory grant	International Grant issued by the Scientific France Embassy	Internship between France and Italian Researcher to work at experimental test facilities

2003–2005	“Studies on the preparation, atomisation and combustion of nanoaluminium – water slurry, a novel “green” propellant for space applications”	International program issued by INTAS, Ref. Nr. 03-53-5203	Project investigating aluminum as fuel for space applications and aluminum/water combustion chemistry and kinetics
2003	“Chemical Microrocket: Scaling and Performance Enhancement”	International program issued by EOARD (European Office of Aerospace Research and Development), Contract Order Number FA8655-02-M034	Project investigating chemical micro-rockets feasibility and thermal load reduction strategy

### Part VII – Research Activities

Keywords	Brief Description
space propulsion, Liquid rocket LRE	advanced space propulsion field, particularly in airbreathing propulsion, micro-thrusters, liquid and hybrid rocket engines;
Hybrid engines HRE	
Combustion	Supersonic and subsonic combustion in homogeneous and heterogeneous phase; plasma assisted combustion by investigating the charged species recombination, the impact of plasma on ignition and flame anchoring
	Aluminum and water combustion for space applications
chemical kinetics	kinetics of combustion in gas phase for aviation fuel (both at low and high pressure); mechanism schemes and reduction methodologies; atmosphere kinetic mechanisms to simulate NOx production and O3 depletion;
hydrocarbon cracking/reforming	hydrocarbon cracking/reforming analysis for light species on board productions, and examination of regenerative cycle performance;
INSRU	INSRU: In Situ Resource Utilization in particular for mars exploration
CFD	CFD (Computational Fluid Dynamics): RANS and LES simulations of scramjet, liquid rocket and hybrid engines.
RANS/LES	
SGS modelling	SGS modeling for turbulent compressible reactive flows

### Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	52 (scopus)	<a href="http://www.scopus.com">www.scopus.com</a>	2004	2019
Total Impact factor		35.94		
Total Citations		478 <a href="http://www.scopus.com">www.scopus.com</a>		
Average Citations per Product		9.19 <a href="http://www.scopus.com">www.scopus.com</a>		
Hirsch (H) index		10 <a href="http://www.scopus.com">www.scopus.com</a>		
Normalized H index*		10 <a href="http://www.scopus.com">www.scopus.com</a> (Publish or Perish)		

\*H index divided by the academic seniority.

## **Publications:**

1. "Catalysis and Cracking for Microrocket Application", E. Giacomazzi, A. Ingenito and C. Bruno, ISTS Paper 2004-b-45, In: Proceedings of the 24th Int. Symp. on Space Technology and Science, ISTS web papers archives, pp. 246-251, Miyazaki, Japan, May 30-June 2, 2004.
2. "LES of Supersonic Combustion of H<sub>2</sub>/vitiated air", A. Del Rossi, A. Ingenito, V. Parisi, E. Giacomazzi and C. Bruno, AIAA Paper 2004-3877, In: Proceeding of 40th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit, Fort Lauderdale, Florida, 11-14 July 2004.
3. "LES Modeling of Scramjet Combustion", A. Ingenito, G. De Flora, E. Giacomazzi, C. Bruno and Johan Steelant, AIAA paper 2006-1383, In: Proceeding of 44th AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV, 9-12 January 2006.
4. "A Novel Model of Turbulent Supersonic Combustion: Development and Validation", A. Ingenito, G. De Flora, E. Giacomazzi, C. Bruno and Johan Steelant, AIAA paper 2006-4351, In: Proceeding of 42nd AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit, Sacramento, California, 9 - 12 Jul 2006.
5. "Supersonic Combustion: Modelling and Simulations", A. Ingenito, E. Giacomazzi, C. Bruno and Johan Steelant, AIAA paper 2006-7962, In: Proceeding of 14th AIAA/AHI Space Planes and Hypersonic Systems and Technologies Conference, Canberra, Australia, 6-9 November 2006.
6. "Advance in Supersonic Combustion Modeling and Simulations", A. Ingenito, C. Bruno and Johan Steelant, paper AIAA-2007-0837, In: Proceeding of 45th AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV, 8-11 January 2007.
7. "Advance in LES Modelling: Effect of the Turbulent Schmidt Number on Supersonic Regime", A. Ingenito, C. Bruno, AIAA paper 2007-5633, 43rd AIAA/ASME/SAE/ASEE Joint Propulsion Conference, Cincinnati, OH, 8-11 July 2007. In: Collection of Technical Papers - 43rd AIAA/ASME/SAE/ASEE Joint Propulsion Conference, Vol. 6, pp. 6162-6170, 2007
8. "Effect of the Turbulent Schmidt Number on Supersonic Regime", A. Ingenito, C. Bruno, paper ISABE-2007-1312, XVIII ISABE CONFERENCE, 2-7 September 2007, Beijing, China. In: Proceedings of the 18th ISABE, AIAA, Reston, VA, 2007, ISBN-10: 1-56347-931-1, ISBN-13: 978-1-56347-931-1
9. "LES of a Supersonic Combustor with Variable Turbulent Prandtl and Schmidt Numbers", A. Ingenito and C. Bruno, AIAA-2008-0515, In: Proceeding of 47th AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV, 7-11 January 2008.
10. "LES of Supersonic combustion with a variable turbulent Schmidt Number", A. Ingenito and C. Bruno, AIAA-2008-2586, In: Proceeding of 15th AIAA International Space Planes and Hypersonic Systems and Technologies Conference, Dayton, Ohio, Apr. 28-1, 2008.

11. "Mixing and Combustion in Supersonic Reactive Flows", A. Ingenito and C. Bruno, AIAA-2008-4574, In: Proceeding of 44th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit, Hartford, CT, July 21-23, 2008.
12. "Reaction Regimes In Supersonic Combustion", A. Ingenito, C. Bruno, Aiaa-2009-0812, In: Proceeding of 47th Aiaa Aerospace Sciences Meeting and Exhibit. Orlando, Florida, 5-8 January 2009.
13. "Sizing of Scramjet Vehicles", A. Ingenito, S. Gulli and C. Bruno, In: Proceeding of 3rd EUCASS Conference, Versailles, 6-9 July 2009;
14. Sizing of TBCC Hypersonic Airbreathing Vehicles, A. Ingenito, S. Gulli, C. Bruno, AIAA-2009-5186, In: Proceeding of 45th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit, Denver, Colorado, Aug. 2-5, 2009;
15. "TBCC Hypersonic Performance: Effect of Inlet Entropy", A. Ingenito, S. Gulli, C. Bruno, AIAA-2009-7419, In: Proceeding of 16th AIAA/DLR/DGLR International Space Planes and Hypersonic Systems and Technologies Conference, Bremen, Germany, Oct. 19-22, 2009;
16. "LES of the HyShot scramjet combustor", A. Ingenito, C. Bruno and D. Cecere, AIAA paper 2010-0758, In: Proceeding of 48th Aiaa Aerospace Sciences Meeting and Exhibit; Orlando, Florida, AIAA-2010-758, 4-7 January 2010;
17. "Sizing of a Ramjet Powered Vehicle for Mars Exploration". A. Ingenito, C. Bruno, P. Czysz; paper SP2010\_1842397, In: Proceeding of ESA-3AF Space Propulsion 2010, San Sebastian, 3 - 6 May 2010;
18. "Advances in LES of the HyShot II Scramjet Combustor", D. Cecere, A. Ingenito, C. Bruno, E. Giacomazzi, F. Donato, In: Proceeding of XXXIII Event of the Italian Section of the CI and Second S4FE, June, 27-30 - 2010, ISBN 978-88-88104-11-9, doi:10.4405/ptse2010.III.
19. "RANS Study of Hydrogen-Air Turbulent Non-Premixed Flames", D. Daniele, E. Giacomazzi, C. Bruno, A. Ingenito, In: Proceeding of XXXIII Event of the Italian Section of the CI and Second S4FE, June, 27-30 - 2010, ISBN 978-88-88104-11-9, doi:10.4405/ptse2010.P1.5.
20. Supersonic combustion regime: numerical and theoretical study, A. Ingenito, D. Cecere, E. Giacomazzi, In: Proceeding of XXXIV Event of the Italian Section of the CI, doi: 10.4405/34proci2011.III3.
21. "Prediction of SCRJ flame anchoring", A. Ingenito, D. Cecere and C. Bruno, In: Proceeding of Second Sino-Italian Conference on Space Aerothermodynamics And Hot Structures, Italy, 6th - 8th July 2010.
22. "Shock/Boundary Layer/Heat Release Interaction in the HyShot II Scramjet Combustor", D. Cecere, A. Ingenito, L. Romagnosi, C. Bruno, E. Giacomazzi, AIAA-2010-7066, In: Proceeding of 46th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit, Nashville, Tennessee, July 25-28, 2010.

23. "Hypersonic vehicles powered by environmental atmosphere ramjet for Mars exploration", A. Ingenito, C. Bruno, P. Czysz, In: Proceeding of 61st International Astronautical Congress, Prague, Czech Republic. Sept. 29 – Oct.1, 2010.
24. "The role of the baroclinic term in fuel/air mixing enhancement", L. Romagnosi, A. Ingenito, D. Cecere, E. Giacomazzi, C. Bruno, AIAA paper 2011-0758, In: Proceeding of 49th Aiaa Aerospace Sciences Meeting and Exhibit; Orlando, Florida, 4-7 January 2011;
25. "Mixing and turbulent kinetic Energy scaling in compressible reacting flows", L. Romagnosi, A. Ingenito, D. Cecere, E. Giacomazzi, C. Bruno, In: Proceeding of 17th AIAA/DLR/DGLR International Space Planes and Hypersonic Systems and Technologies Conference, AIAA-2011-2364, San Francisco, USA, 2011; ISBN: 978-1-60086-942-6, DOI: 10.2514/MHYTASP11
26. "LAPCAT II : conceptual design of a Mach 8 TBCC civil aircraft, enforced by full Navier-Stokes 3D nose-to-tail computation", Sebastien Defoort, Marc Ferrier, Laurent Serre, Dominique Scherrer, Christophe Paridaens, Patrick Hendrick, Antonella Ingenito and Claudio Bruno, AIAA-2011-2317, 17th AIAA International Space Planes and Hypersonic Systems and Technologies Conference , San Francisco, California, Apr. 11-14, 2011, 978-1-60086-942-6
27. "LAPCAT II : conceptual design of a Mach 8 TBCC civil aircraft", Sébastien DEFOORT, Marc FERRIER, Dominique SCHERRER, Laurent SERRE, Christophe PARIDAENS, Patrick HENDRICK, Antonella INGENITO, Claudio BRUNO, 4TH EUROPEAN CONFERENCE FOR AEROSPACE SCIENCES (EUCASS), Saint Petersburg, Russia, 4 – 8, July 2011;
28. "Turbulence Scaling in Supersonic Flows", Antonella Ingenito and Claudio Bruno, 28th ISTS, 5-12 June 2011, Japan.
29. "Aeronautical approach and support to Mars Exploration", C. Bruno, A. Ingenito, D. Simone, P. Czysz , J. W. Lee, Proceeding of 47th JPC Conference, Paper N. AIAA-2011-5724, 2 August 2011, San Diego (CA), 978-1-60086-949-5, DOI: 10.2514/6.2011-5724
30. "Theoretical and Numerical analysis of the Turbulence scaling in Supersonic Flows", A. Ingenito, D. Cecere, E. Giacomazzi, C. Bruno, Paper no. AIAA-2011-5919, Invited, 47th JPC Conference, 2 August 2011, San Diego, CA , 978-1-60086-949-5.
31. "Numerical and Theoretical Study of Supersonic Turbulent Non premixed flames", A. Ingenito, L. Romagnosi, D. Cecere, E. Giacomazzi and C. Bruno, ISABE-2011-1535, September 12-16, 2011, Göteborg, Sweden, ISBN 9781618391803;
32. "Supersonic combustion regime: Numerical and theoretical study", A. Ingenito, D. Cecere, E. Giacomazzi, Italian Session of the Combustion Institute, 24-26 October, 2011, ISBN 978-88-88104-11-9.
33. "Supersonic Turbulent Non premixed flames: Numerical and Theoretical Study", A. Ingenito, L. Romagnosi, D. Cecere, E. Giacomazzi and C. Bruno, 3th Sino-Italian Conference on Space Aerothermodynamics and Hot Structures, Shanghai · China, November 21-23, 2011.

34. "Non-Premixed Supersonic Flames: Combustion Models", A. Ingenito, D. Cecere, E. Giacomazzi, C. Bruno, AIAA paper 2012-0758, In: Proceeding of 50th Aiaa Aerospace Sciences Meeting and Exhibit; Orlando, Florida, 9-12 January 2012, ISBN: 978-1-60086-936-5, DOI: 10.2514/MASM12
35. "A comparative study of combustion between biofuels and fossil fuels", A. Ingenito, R. Andriani, A. Agresta, F. Gamma, In: Proceeding of 10th Annual International Energy Conversion Engineering Conference, 29 July - 1 August 2012, Atlanta, Georgia, ISBN: 978-1-62410-190-8, DOI: 10.2514/MIECEC12.
36. Numeric Simulation of a Gas Turbine Engine With Constant Volume Combustion, R. Andriani, A. Ingenito, F. Gamma, A. Agresta, In: Proceeding of 10th Annual International Energy Conversion Engineering Conference, 29 July - 1 August 2012, Atlanta, Georgia, ISBN: 978-1-62410-190-8, DOI: 10.2514/MIECEC12.
37. Thermodynamic Characteristics of a Turboprop Engine with Heat Exchangers for Unmanned Aerial Vehicles, Roberto Andriani, Antonella Ingenito, Fausto Gamma, Antonio Agresta, 51st AIAA Aerospace Sciences Meeting, January 2013, DOI: 10.2514/6.2013-114
38. Off-Design Characteristics of Low-Fuel Consumption Gas Turbine Engine for Long-Range UAV (AIAA 2013-3630), Roberto Andriani, Umberto Ghezzi, Antonella Ingenito, Fausto Gamma, Antonio Agresta, 49th AIAA/ASME/SAE/ASEE Joint Propulsion Conference, July 2013, DOI: 10.2514/6.2013-3630
39. Air vitiation effects in scramjet engines (AIAA 2013-3701), Antonella Ingenito, Antonio Agresta, Roberto Andriani, Fausto Gamma, 49th AIAA/ASME/SAE/ASEE Joint Propulsion Conference, July 2013, DOI: 10.2514/6.2013-3701
40. Laminar flame speed of Fossil/Air and Biofuels/Air Combustion (AIAA 2013-3739), Antonella Ingenito, Roberto Andriani, Antonio Agresta, Fausto Gamma, 11th International Energy Conversion Engineering Conference, July 2013, DOI: 10.2514/6.2013-3739
41. Low-Fuel Consumption Gas Turbine Engines for Extended-Range UAVs, Roberto Andriani, Antonella Ingenito, Fausto Gamma, Antonio Agresta, January 2014, 52nd Aerospace Sciences Meeting, doi: 10.2514/6.2014-1315
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**In press:**

71. A. Ingenito, Subsonic Ramjet Combustion Design, Special Issue “Ramjet and scramjet Combustion”, *Energies*, In press

**Part IX– Selected Publications**

List of the publications selected for the evaluation. For each publication report title, authors, reference data, journal IF (if applicable), citations, press/media release (if any).

1. Physics and regimes of supersonic combustion, , Ingenito, A., Bruno, C., (2010) *AIAA Journal*, 48 (3), pp. 515-525. DOI: 10.2514/1.43652, IF: 1.97, Cited 66 times ([www.scopus.com](http://www.scopus.com)).
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10. NOx reduction strategies for high speed hydrogen fuelled vehicles, Ingenito, A., Agresta, A., Andriani, R., Gamma, F., (2015) *International Journal of Hydrogen Energy*, 40 (15), pp. 5186-5196. ISSN:1879-3487, IF: 3.46, Cited 9 times ([www.scopus.com](http://www.scopus.com)).
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