

DANIELE BIANCHI

Curriculum Vitae

Place: Rome
Date: 30/06/2025

Part I – General Information

Full Name	Daniele Bianchi
Date of Birth	08/03/1979
Place of Birth	Rome
Citizenship	Italian
Permanent Address	Via Luigi Lucatelli, 49 – 00159 Rome
Mobile Phone Number	+39 347 9465086
E-mail	daniele.bianchi@uniroma1.it
Spoken Languages	Italian, English (fluent), French (basic understanding)

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	2004	“Sapienza” University of Rome, Rome, Italy	Master of Science degree in Aerospace Engineering (Laurea in Ingegneria Aerospaziale) with full marks (110/110 cum laude)
PhD	2008	“Sapienza” University of Rome, Rome, Italy	PhD degree in Theoretical and Applied Mechanics (Meccanica Teorica e Applicata), XX cycle

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
01/2020	Present	“Sapienza” University of Rome	Associate Professor in Aerospace Propulsion, full-time
01/2020	Present	“Sapienza” University of Rome	Director of the International 2 nd level Master Course in <i>Space Transportation Systems: Launchers and Re-entry vehicles (STS)</i> https://web.uniroma1.it/mastersts
2022	Present	“Sapienza” University of Rome	Scientific Coordinator of a 3-year fixed-term researcher (RTD-A) position in Aerospace Propulsion (formal request for a 2-year extension currently in progress)
2017	Present	“Sapienza” University of Rome	Member of the board of the PhD course in <i>Aeronautical and Space Engineering</i> https://phd.uniroma1.it/web/
2017	2020	“Sapienza” University of	Scientific and Didactic Coordinator of the

		Rome	International 2 nd level Master Course in <i>Space Transportation Systems: Launchers and Re-entry vehicles (STS)</i> https://web.uniroma1.it/mastersts
2017	Present	“Sapienza” University of Rome Centro di ricerca aerospaziale Sapienza	Member of CRAS the interdepartmental center for aerospace research of Sapienza (Centro di ricerca aerospaziale Sapienza)
2017	2020	“Sapienza” University of Rome	Assistant Professor in Aerospace Propulsion, full-time (3-year contract) – RTD-B
2015	2017	“Sapienza” University of Rome	Assistant Professor in Aerospace Propulsion, full-time (2-year extension) – RTD-A
2013	2015	“Sapienza” University of Rome	Assistant Professor in Aerospace Propulsion, full-time (3-year contract) – RTD-A
2012	2013	“Sapienza” University of Rome	Post-Doctoral Fellowship in Aerospace Propulsion
2008	2012	“Sapienza” University of Rome	Post-Doctoral Fellowship in Aerospace Propulsion
2004	2007	“Sapienza” University of Rome	Doctorate Fellowship in Theoretical and Applied Mechanics, XX cycle

IIIB – Other Appointments

Start	End	Institution	Position
2024	Present	“Sapienza” University of Rome	Delegate of the Rector. Formally appointed by the Rector of Sapienza University, Prof. Antonella Polimeni, to represent the University at the Ordinary Shareholders’ Meeting of Space It Up SCARL . The delegation included full authority to act and vote on behalf of the University
2023	2024	ESA - European Space Agency, Director General's Office	Member of the Independent Enquiry Board appointed by the Director General's Office to investigate the anomaly during the Zefiro 40 motor hot firing test
2020	Present	“Sapienza” University of Rome, Faculty of Civil and Industrial Engineering	Member of the Faculty Council (Giunta di Facoltà) as representative of Associate Professors, Faculty of Civil and Industrial Engineering – currently serving a second term
2020	Present	“Sapienza” University of Rome, Department of Mechanical and Aerospace Engineering	Member of the Department Council (Giunta di Dipartimento) as representative of Associate Professors, Department of Mechanical and Aerospace Engineering – currently serving a second term
2021	Present	Sapienza Aerospace Student Association, “Sapienza” University of	Faculty Advisor of SASA – Sapienza Aerospace Student Association

		Rome	founded in 2012 as AIAA Student Branch (first in Italy) that gathers about 400 student members https://www.sasa-aerospace.it
2021	2022	“Sapienza” University of Rome	Member of the Research Evaluation Committee at Sapienza University of Rome for the evaluation and selection of university-funded research projects (overall budget: 12-13 M€ per year). The committee is chaired by the Rector or a delegate. Service period: 2021–2022
2020	Present	“Sapienza” University of Rome, Department of Mechanical and Aerospace Engineering	Delegate of the Head of Department (Department of Mechanical and Aerospace Engineering) for relations with student associations
2020	Present	“Sapienza” University of Rome, Faculty of Civil and Industrial Engineering	Delegate of the President of the Aerospace Engineering Degree Program (CAD in Ingegneria Aerospaziale) for relations with student associations
2018	2021	Sapienza Aerospace Student Association, “Sapienza” University of Rome	Faculty Advisor of SASA – SRT Sapienza Rocket Team founded in 2018 that gathers about 200 student members https://www.sasa-aerospace.it
2016	Present	“Sapienza” University of Rome, Faculty of Civil and Industrial Engineering	Member of the Teaching Observatory (ODA) by the Aerospace Engineering Degree Program. The Teaching Observatory is a committee composed of faculty members and student representatives.
2022	2023	Politecnico di Torino	Member of the Evaluation Committee for the Selection of an Associate Professor – Politecnico di Torino
2024	2024	Università degli Studi di Napoli Federico II	Member of the Evaluation Committee for the confirmation of two RTD-A positions – Università degli Studi di Napoli Federico II
2025	Present	“Sapienza” University of Rome, Department of Mechanical and Aerospace Engineering	Member of the Evaluation Committee for PhD Admission – 41 st Cycle – Sapienza Università di Roma
2024	2024	Politecnico di Milano	Member of the Doctoral Defense Committee – Politecnico di Milano
2023	2023	Institut supérieur de l'aéronautique et de l'espace ISAE-SUPAERO	Member of the Doctoral Defense Committee – ISAE-SUPAERO
2022	2022	Università degli Studi di Padova	Member of the Doctoral Defense Committee – Università degli Studi di

2020	2020	Università degli Studi di Padova	Padova
			Member of the Doctoral Defense Committee – Università degli Studi di Padova
2019	2019	Institut supérieur de l'aéronautique et de l'espace ISAE-SUPAERO	Member of the Doctoral Defense Committee – ISAE-SUPAERO
2013	2021	American Institute of Aeronautics and Astronautics (AIAA)	Member of the Technical Programme Committee (for Solid Propulsion) of the <i>Propulsion and Energy Forum and Exposition Conference</i> by the AIAA
2021	Present	European Space Agency (ESA)	Member of the Technical Programme Committee of the <i>International Conference on Flight Vehicles, Aerothermodynamics and Re-entry Missions and Engineering</i> (FAR) by the European Space Agency
2020	Present	<i>AIAA Journal</i> – AIAA J (AIAA)	Reviewer
2018	Present	<i>Journal of Aerospace Engineering</i> – ASENT (ASCE)	Reviewer
2019	Present	<i>Aerospace</i> – Open Access Journal (MDPI)	Reviewer
2016	Present	<i>Acta Astronautica</i> – AA (Elsevier)	Reviewer
2016	Present	<i>Aerospace Science and Technology</i> – AESCTE (Elsevier)	Reviewer
2016	Present	<i>Journal of Propulsion and Power</i> – JPP (AIAA)	Reviewer
2013	Present	<i>Journal of Spacecraft and Rockets</i> – JSR (AIAA)	Reviewer
2014	Present	<i>International Journal of Heat and Mass Transfer</i> – HMT (Elsevier)	Reviewer
2010	Present	<i>Journal of Thermophysics and Heat Transfer</i> – JTHT (AIAA)	Reviewer

Part IV – Teaching experience

Year	Institution	Lecture/Course
2023/2024 Present	“Sapienza” University of Rome, Faculty of Civil and Industrial Engineering	Course Instructor (docente titolare) of " <i>Hypersonic Propulsion</i> " (6 CFU) in the Master of Science in Space and Astronautical Engineering (MSAR) – responsible for 3 CFU
2023/2024 Present	“Sapienza” University of Rome, Faculty of Civil and Industrial Engineering	Course Instructor (docente titolare) of " <i>Spacecraft Propulsion</i> " (6 CFU) in the Master of Science in Space and Astronautical Engineering (MSAR)
2019/2020	“Sapienza” University of Rome,	Course Instructor (docente titolare) of " <i>Solid</i>

Present	Faculty of Civil and Industrial Engineering	<i>Rocket Motors</i> " (6 CFU) in the Master of Science in Space and Astronautical Engineering (MSAR)
2020/2021 2022/2023	"Sapienza" University of Rome, Faculty of Civil and Industrial Engineering	Course Instructor (docente titolare) of " <i>Propulsori Astronautici</i> " (6 CFU) in the Master of Science in Space and Astronautical Engineering (MSAR)
2016/2017 2019/2020	"Sapienza" University of Rome, Faculty of Civil and Industrial Engineering	Course Instructor (docente titolare) of " <i>Space Propulsion</i> " (9 CFU) in the Master of Science in Space and Astronautical Engineering – responsible for 6 CFU (<i>Mod 2 – Rocket Propulsion</i>)
2013/2014 2021/2022	"Sapienza" University of Rome, Faculty of Civil and Industrial Engineering	Course Instructor (docente titolare) of " <i>Laboratorio di Propulsione Spaziale</i> " (3 CFU) in the Bachelor of Science in Aerospace Engineering (BAER)
2013/2014 Present	"Sapienza" University of Rome, Faculty of Civil and Industrial Engineering	Lecturer for the 2 nd level Master Course in <i>Space Transportation Systems: Launchers and Re-entry vehicles (STS)</i> . Covered topics: Launcher Design Coursework; Rocket Performance Parameters; Fundamentals and Design of SRMs; Ablation Phenomena in SRM Nozzles; SRM Internal Ballistics and Flight Performance Analysis.
2013/2014 Present	"Sapienza" University of Rome, Bachelor's Degree in <i>Aerospace Engineering</i>	Supervisor (relatore) of 60 Thesis
2013/2014 Present	"Sapienza" University of Rome, Master's Degree in <i>Space and Astronautical Engineering</i>	Supervisor (relatore) of 40 Thesis
2019/2020 Present	"Sapienza" University of Rome, PhD course in <i>Aeronautical and Space Engineering</i>	Supervisor (relatore) of 5 PhDs Felix Weber 36 st Cycle Marco Rotondi 36 st Cycle Gianluca Cocirla 38 st Cycle Alessio Sereno 39 st Cycle Giacomo Passarani 40 th Cycle

Part V - Society memberships, Awards and Honors

Year	Title
2021	2021 AIAA Best Paper by the AIAA Hybrid Rockets Technical Committee for the technical paper entitled " <i>Machine Learning Techniques for Flight Performance Prediction of Hybrid Rocket Engines</i> ", AIAA 2021-3506 (last author)
2010	2010 AIAA Best Paper by the AIAA Solid Rockets Technical Committee for the technical paper entitled " <i>Thermochemical Erosion Analysis of Carbon-Carbon Nozzles in Solid-Propellant Rocket Motors</i> ", AIAA Paper 2010-7075 (first author)
2018	Invited lecturer for the works entitled " <i>Recombination Reaction Contribution to Wall Heat Transfer in LOX/CH4 Engines</i> " and " <i>Radiative Wall Heat Transfer Estimation in Liquid Rocket Thrust Chambers</i> " in the 1 st International Conference of Sino-Italy Joint

	Lab on Simulation Technologies of LRE, Feb. 25-26, 2018, Xi'an Aerospace Propulsion Institute, China Aerospace Science and Technology Corporation (CAST) , Xi'An, China
2016	Invited lecturer (keynote) for the work entitled “ <i>Numerical Simulations and Modeling Challenges in Hybrid Rockets</i> ” in the Flow Dynamics and Combustion Technology in Hybrid Rocket Propulsion session of the 13th International Conference on Flow Dynamics , Oct. 10-12, 2016, Sendai, Miyagi, Japan
2011 - 2021	Member of the <i>Solid Rocket Technical Committee</i> of the American Institute of Aeronautics and Astronautics (AIAA)
2011 - Present	Member of the <i>Ablation Modelling Workshop</i> (sponsored by NASA, Sandia and AFOSR)
2007 - Present	Member of the <i>American Institute of Aeronautics and Astronautics</i> (AIAA)

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

Year	Title	Program	Grant value
2024 - 2027	<i>Space It Up! Project</i> (Prime Contractor Space It Up S.c.a.r.l.)	Bando per "Attività spaziali" (tematica 15), di cui all'avviso MUR n. 341 del 15/03/2022 - Progetto Space It Up - Contratto n. 2024-5-E.0 - CUP n. I53D24000060005	€5.33M (role Sapienza PI); €79.56M total project funding
2020 - 2024	<i>Advancing Space Access Capabilities Reusability and Multiple Satellite Injection</i> (ASCenSIon)	European Community H2020 - MSCA-ITN-2019 Grant Agreement no. 860956	€261.50k (role Sapienza PI); €3.88M total project funding
2024 - 2025	<i>Cooling System and nozzle performance</i>	AVIO S.p.a.	€84.00k (role PI)
2023 - 2024	<i>Zefiro 40 SRM Nozzle CFD Flow Field Cross-Check</i>	European Space Agency ESA/ESRIN Vega-IPT contract no. 4000120618/17/I/AL CCN1	€65.00k (role PI)
2023 - 2024	<i>Z40 nozzle thermo-ablative and thermo-structural assessment</i>	AVIO S.p.a.	€55.00k (role PI); €115.00k total project funding
2023 - 2024	<i>Zefiro 40 SRM VV21 and QM2 Performance and Throat Erosion Assessment</i>	European Space Agency ESA/ESRIN Vega-IPT contract no. 4000120618/17/I/AL CCN1	€65.00k (role PI)
2022 - Present	<i>Attività di ricerca e sviluppo tecnologico con- cernente il design, lo sviluppo e la qualifica di un motore green multi-purpose per applica- zioni orbitali e sub-orbitali (IOS, VEGA-C, VEGA-E e Space Rider) in attuazione del Piano</i>	AVIO S.p.a.	€538.00k Sapienza (role I)

	<i>Operativo del sub-investimento M1C2.I4.4 relativo a “In-Orbit Economy- In Orbit services” del PNRR-FC</i>		
2022 - Present	<i>High Thrust Engine (HTE): Sistemi di raffreddamento, ugelli ed analisi di sistema motore</i>	AVIO S.p.a.	€420.00k Sapienza (role I)
2020 - 2023	<i>Ricerca e sviluppo tecnologico sulla Propulsione Ibrida basata su propellenti a paraffina</i>	Agenzia Spaziale Italiana (ASI) Accordo n. 2019-5-I.0	€155.00k Sapienza (role I); €1.30M total
2021 - 2023	<i>EVACPRO: ESPSS Validation Activities for Chemical Propulsion Systems</i>	European Space Agency ESA ESTEC	€95.00k Sapienza (role I); €400.00k total project
2019 - 2021	<i>RIPAS Programme – Rilancio dei Programmi di Accesso allo Spazio dalla Base di Malindi Luigi Broglio Space Centre (BSC)</i>	Agenzia Spaziale Italiana (ASI) Accordo n. 2018-34-H.0	€143.69k (role PI)
2020 - 2021	<i>Mono- and Bi-Propellant Flow Characterization in Generic Propulsion Systems</i>	European Space Agency ESA ESTEC contract no. 4000129564/19/NL/MG	€58.00k Sapienza (role I); €298.00k total project funding
2018 - 2020	<i>Modelling Capsule Stability Accounting for Shape Change</i>	European Space Agency ESA ESTEC contract no. 4000121241/17/NL/KML	€50.00k (role Sapienza PI); €300.00k total project funding
2018 - 2021	<i>Ricerca e sperimentazione di Materiali, sistemi Diagnostici e di Controllo ambientale per i veicoli di trasporto spaziale di generazione Evoluta (Generazione E)</i>	MIUR: PON “Ricerca e Innovazione”	€361.00k Sapienza I
2020 - 2022	<i>TECHNICAL SUPPORT ACTIVITIES FOR VEGA-C, VEGA-E AND P-120C / WORK ORDER 3</i>	European Space Agency ESA/ESRIN Vega-IPT contract no. 4000120618/17/I/AL	€105.00k (role co-PI); €855.00k total project funding
2017 - 2019	<i>TECHNICAL SUPPORT ACTIVITIES FOR VEGA-C, VEGA-E AND P- 120C / WORK ORDER 1</i>	European Space Agency ESA/ESRIN Vega-IPT contract no. 4000120618/17/I/AL	€40.00k (role co-PI); €470.00k total project funding
2014 - 2017	<i>Catalytic Properties of Ablators</i>	European Space Agency ESA ESTEC contract no. 4000112183/14/NL/RA	€70.00k Sapienza (role I); €470.00k total project funding
2015 - 2017	<i>Support and Cross-check Activities of VEGA and VECEP Solid Propulsion (Period 2015 – 2017)</i>	European Space Agency ESA/ESRIN Vega-IPT contract no.	€35.00k (role co-PI)

		4000202871/10/I/JD CCN6	
2013 - 2015	<i>Analysis of vulcain 2 engine operational anomalies</i>	European Space Agency ESA ESTEC	Investigator
2013 - 2014	<i>Support and Cross-check Activities of VEGA and VECEP Solid Propulsion (Period 2013 – 2014)</i>	European Space Agency ESA/ESRIN Vega-IPT	Investigator
2012 - 2013	<i>A CEA-based Chemical Equilibrium Solver for Gas Surface Thermochemistry and Thermochemical Tables Generation</i>	EADS Astrium GmbH	Investigator
2012 - 2013	<i>ESA-TRP on Hypersonic Flow Analysis with Gas-Surface Interaction Modelling</i>	European Space Agency ESA ESTEC	Investigator
2011 - 2013	<i>Development and integration of the Italian scientific expertise for the progress of hybrid rocket engines</i>	PRIN: progetti di ricerca di interesse nazionale	Investigator
2011 - 2013	<i>Progetto ICARO: Scenario, Vincoli, Requisiti e Simulazione Aerotermica per il Progetto Esperimento Ablativi</i>	POR-FESR Lazio	Investigator
2011 - 2012	<i>Ablative Chamber Analysis for Liquid Propellant Engine</i>	AVIO S.p.a.	Investigator
2009 - 2012	<i>In Space Propulsion 1</i>	European Community - FP7 Programme	Investigator
2006 - 2010	<i>CAST: Configurazioni Aerotermodinamiche Innovative per Sistemi di Trasporto Spaziale</i>	Agenzia Spaziale Italiana (ASI) / Centro Italiano Ricerche Aerospaziali(CIRA)	Investigator
2005 - 2008	<i>ESA-TRP on Multiphysics Modelling of Near Surface Phenomena</i>	European Space Agency ESA ESTEC	Investigator
2006 - 2006	<i>Modelli di predizione dell'ablazione in ugelli di endoreattori a propellente solido</i>	AVIO S.p.a.	Investigator
2005 - 2006	<i>ESA-TRP on Wall Heat Transfer Prediction in Regeneratively Cooled Thrust Chambers</i>	European Space Agency ESA ESTEC	Investigator

Part VII – Research Activities

Keywords	Brief Description
Navier-Stokes & CFD	Modelling and Computational Fluid Dynamics analysis of high-speed high-temperature chemically reacting turbulent flows coupled with surface heat and mass transfer for space application with particular attention to: Gas Surface Interaction (GSI) modelling for thermoablative materials, hypersonic and atmospheric re-entry, liquid rocket engines thrust chamber heat transfer, hybrid rocket engines and solid rocket motors internal ballistics, fuel regression rate and nozzle ablation. Numerical solution of RANS equation with complex wall ablative boundary conditions (ablative product injection, equilibrium or
High-speed high-temperature flows	
Gas Surface Interaction (GSI) modelling	
Solid Rocket Motors nozzles	
Solid Rocket Motors internal ballistics	
Liquid Rocket Engines thrust	

chambers	chemical kinetics, pyrolysis, catalysis, oxidation, surface energy and mass balance, conjugate heat transfer) for flow/material interaction in solid rocket motors, hybrid rocket engines and atmospheric re-entry capsules. Models and equations for surface thermochemistry and near surface thermophysics of aerodynamically heated thermal protection materials (TPS). Ablation models for charring and non-charring TPS materials and for low-temperature ablaters. Transient in-depth computational solid mechanics of the ablative material. Coupled flow/material problems and conjugate heat transfer.
Hybrid Rocket Engines internal ballistics	
Hypersonic and atmospheric Reentry	
Thermal Protection Systems (TPS) materials	
Conjugate heat transfer	
Thermochemical Ablation	

Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international] with peer review	41	SCOPUS	2009	2025
Papers [international] conference proc.	73	SCOPUS	2006	2025
Books [scientific]	2	EUCASS	2012	2018

Documents	114 (Scopus) 95 (ScholarGPS)
Total Citations	1466 (Scopus) 1734 (ScholarGPS)
Hirsch (H) index	22 (Scopus) 26 (ScholarGPS)

Ranking from ScholarGPS

<https://scholargps.com/scholars/11498008286580/daniele-bianchi>

ScholarGPS ranking on PROPULSION: 0.32%

ScholarGPS ranking on ROCKET ENGINE: 0.36%

ScholarGPS ranking: Top 6 Scholars on PROPULSION in ITALY (Top 190 globally)

https://scholargps.com/rankings/top_scholars_by_country

ScholarGPS ranking: Top 5 Scholars on ROCKET ENGINE in ITALY (Top 27 globally)

https://scholargps.com/rankings/top_scholars_by_country

Participation as speaker in the following International Conferences:

1. **2025:** *11th European Conference for Aeronautics and Space Sciences*, 30 June – 4 July 2025, Rome, Italy (planned)
2. **2021:** *2021 AIAA Propulsion and Energy Forum*, 11 – 13 August 2021, Virtual Event.
3. **2020:** *2020 AIAA Propulsion and Energy Forum*, 24 – 26 August 2020, Virtual Event.
4. **2019:** *XXV International Aeronautical and Astronautical Congress AIDAA*, 9 – 12 September 2019, Rome, Italy.
5. **2019:** *8th European Conference for Aeronautics and Space Sciences*, 1 – 4 July 2019, Madrid, Spain.
6. **2018:** *54th AIAA/SAE/ASEE Joint Propulsion Conference and Exhibit*, 9 – 11 July 2018, Cincinnati, OH, USA.
7. **2018:** *1st International Conference of Sino-Italy Joint Lab on Simulation Technologies of*

- LRE (invited lecturer)*, 25 – 26 February 2018, Xi'an Aerospace Propulsion Institute, China Aerospace Science and Technology Corporation (CAST), Xi'an, China.
8. **2017**: *53rd AIAA/SAE/ASEE Joint Propulsion Conference and Exhibit*, 10 – 12 July 2017, Atlanta, GA, USA.
 9. **2016**: *13th International Conference on Flow Dynamics – Flow Dynamics and Combustion Technology in Hybrid Rocket Propulsion session (invited paper, keynote)*, 10 – 12 October 2016, Sendai, Japan
 10. **2016**: *Space Propulsion 2016*, 2 – 6 May 2016, Rome, Italy.
 11. **2015**: *51st AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit*, 27 – 29 July 2015, Orlando, FL, USA.
 12. **2014**: *Space Propulsion 2014*, 19 – 22 May 2014, Cologne, Germany.
 13. **2013**: *49th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit*, 14 - 17 July 2013, San Jose, CA, USA.
 14. **2013**: *7th European Workshop on Thermal Protection Systems and Hot Structures*, 8 - 10 April 2013, ESA-ESTEC, Noordwijk, The Netherlands.
 15. **2012**: *48th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit*, 30 July - 01 August 2012, Atlanta, GA, USA.
 16. **2012**: *50th AIAA Aerospace Science Meeting including the New Horizon Forum and Aerospace Exposition*, 09-12 January 2012, Nashville, TN, USA.
 17. **2011**: *47th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit*, 31 July - 03 August 2011, San Diego, CA, USA.
 18. **2011**: *3rd International ARA Days*, 2-4 May 2011, Arcachon, France.
 19. **2011**: *17th AIAA International Space Planes and Hypersonic Systems and Technologies Conference*, 11 – 14 April 2011, San Francisco, CA, USA.
 20. **2010**: *46th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit*, 25 – 28 July 2010, Nashville, TN, USA.
 21. **2010**: *Space Propulsion 2010*, 3 – 6 May 2010, San Sebastian, Spain.
 22. **2009**: *45th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit*, 2 – 5 August 2009, Denver, CO, USA.
 23. **2009**: *6th European Workshop on Thermal Protection Systems and Hot Structures*, 1 – 3 April 2009, Stuttgart, Germany.
 24. **2008**: *6th European Symposium on Aerothermodynamics for Space Vehicles*, 3 – 6 November 2008, Versailles, France.
 25. **2008**: *40th AIAA Thermophysics Conference*, 23 – 26 June 2008, Seattle, WA, USA.
 26. **2007**: *39th AIAA Thermophysics Conference*, 25 – 28 June 2007, Miami, FL, USA.
 27. **2006**: *4th Annual International Planetary Probe Workshop*, 27 – 30 June 2006, Pasadena, CA
 28. **2006**: *5th European Workshop on Thermal Protection Systems and Hot Structures*, 17 – 19 May 2006, Noordwijk, The Netherland.

Part IX– Journal Publications

List of all the publications in peer-reviewed Journals.

1. Scarlatella G., Sieder-Katzmann J., Propst M., Heutling T., Petersen J., Weber F., Portolani M., Garutti M., **Bianchi D.**, Pastrone D., Ferrero A., Tajmar M., Bach C.
RANS Simulations of Advanced Nozzle Performance and Retro-Flow Interactions for Vertical Landing of Reusable Launch Vehicles
(2025) **Aerospace**, 12 (2), art. no. 124, Cited 0 times.
DOI: 10.3390/aerospace12020124

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85218879783&doi=10.3390%2faerospace12020124&partnerID=40&md5=10f14c737d0c7632ecb58b40b362e252>

2. Saccone G., Marini M., Tiseo B., Schettino A., French A.D., De Filippis F., Leporanco F., Fragiaco M., Cretella A., Nasuti F., **Bianchi D.**, Rotondi M., De Giorgi M.G., Di Gloria P., Trifuoggi M., Giarra A., Marano A.
Design and manufacturing of a supersonic scrubber for pollution control in solid rocket motor firing tests
(2025) **CEAS Space Journal**, Cited 0 times.
DOI: 10.1007/s12567-025-00604-z
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-105000472730&doi=10.1007%2fs12567-025-00604-z&partnerID=40&md5=27deb8349be0f6592b16ae4db2236a6b>
3. Zolla P.M., Rosa R., Migliorino M.T., **Bianchi D.**
Multi-disciplinary optimization of single-stage hybrid rockets for lunar ascent
(2024) **Acta Astronautica**, 222, pp. 493 - 507, Cited 3 times.
DOI: 10.1016/j.actaastro.2024.06.026
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85196792583&doi=10.1016%2fj.actaastro.2024.06.026&partnerID=40&md5=d6e9b5c6de94513f5bb74da577142570>
4. Nasuti F., Fiore M., Messina V., Valeriani A., **Bianchi D.**
Design and Evaluation of Aerospoke Nozzles for an Upper-Stage Application
(2024) **Journal of Spacecraft and Rockets**, 61 (4), pp. 1047 - 1058, Cited 1 times.
DOI: 10.2514/1.A35918
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85202441760&doi=10.2514%2f1.A35918&partnerID=40&md5=7e9076bac2d21fcaccbece5aa1338e5a>
5. Stella M., Zeni L., Nichelini L., Bellomo N., Pavarin D., Migliorino M.T., Fabiani M., **Bianchi D.**, Nasuti F., Paravan C., Galfetti L., Cretella A., Pellegrini R.C., Cavallini E., Barato F.
Experimental Investigation of a H₂O₂ Hybrid Rocket with Different Swirl Injections and Fuels
(2024) **Applied Sciences (Switzerland)**, 14 (13), art. no. 5625, Cited 3 times.
DOI: 10.3390/app14135625
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85198496030&doi=10.3390%2fapp14135625&partnerID=40&md5=d5b6b5b3bdbe90586b97babd7c08e95c>
6. Rotondi M., Migliorino M.T., **Bianchi D.**, Kamps L., Nagata H.
Computational Analysis and Regression Laws for Nozzle Erosion Prediction in Hybrid Rockets
(2024) **Journal of Propulsion and Power**, 40 (3), pp. 439 - 459, Cited 6 times.
DOI: 10.2514/1.B39322

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List of all the publications in Conference Proceedings.

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Performance Analysis of Aerospikes with Clustered Non-Conventional Modules
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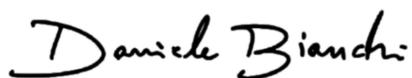
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Roma, 30/06/2025

Daniele Bianchi

A handwritten signature in black ink, reading "Daniele Bianchi". The script is cursive and fluid, with the first letter 'D' being particularly large and stylized.