GIOVANNI DELIBRA

curriculum vitae et studiorum edited for web publication

Part I - General Information

Full Name: Giovanni Delibra

Gender: male Spoken languages:

• Italian: mother tongue

• English: proficient user, level C2*

• French: basic user, level A2*

Part II - Education

PhD project on heat transfer modeling in gas turbine.

01.Feb.2011

Doctorate school of theoretical and applied mechanics

Sapienza University of Rome

Final thesis on: "URANS, LES and hybrid RANS/LES of flow and heat transfer in flow configurations relevant to thermal turbomachinery". Supervisor: Prof. Kemal Hanjalić, Marie Curie Chair, COMSITA Excellence Grant holder

MSc in Mechanical Engineering (5 years course – *Laurea V.O.*) Sapienza University of Rome

18.Jul.2007

Final thesis on: "Comparison of classical and innovative RANS models for the analysis of internal flows in presence of turbulence generators". Supervisor: Prof. Franco Rispoli, Tutors: Prof. Kemal Hanjalic, Marie Curie Chair, COMSITA Excellence Grant holder and Dr. Domenico Borello.

Part III - Appointments

Qualified as Associate Professor by Italian ASN, scientific sector 09/C1, (Macchine e sistemi per l'energia e l'ambiente)

28.Mar.2017

Research associate 2019-2020

Development of artificial intelligence for energy conversion systems

Research contract *Baker Hughes* and *NAVARM Ministero della Difesa* Department of Mechanical and Aerospace Engineering,

Sapienza University of Rome

Postdoctoral Research Scientist,

2018

Development of a machine-learnt turbulence model for turbomachinery applications CERSITES, Centro di Ricerca per l'innovazione tecnologica sostenibile Sapienza University of Rome

Postdoctoral Research Scientist (Assegnista di Ricerca, 6 years),

2011-2017

Department of Mechanical and Aerospace Engineering,

Sapienza University of Rome

^{*} according to Common European Framework of Reference for Languages

Visiting Researcher,

01.Mar.2010-30.Jun.2010

Dept. of mechanics Chalmers, Goteborg (SE)

Visiting Researcher, HPCEuropa++ Principal Investigator

15.Oct.2010-15.Dec.2010

Department of Multi-Scale Physics TUDelft, Delft (NL)

Part IV - Teaching Experience

Lecturer

Year	Institution	Lecture/Course					
2020/21	Sapienza	Energy Systems, BSc. Mech. Engineering					
2020/21	Sapienza	Energy Systems, BSc. Mech. Engineering and Env.	3				
		Engineering					
2020/21	Sapienza	Computational Thermo-Fluids Analysis in Fluid Machinery,					
		MSc. Mech. Engineering					
2019/20	Sapienza	Energy Systems, BSc. Mech. Engineering	3				
2019/20	Sapienza	Advanced Energy Conversion Systems, MSc. Mech. Eng. and	3				
		Env. Eng.					
2019/20	Sapienza	Computational Thermo-Fluids Analysis in Fluid Machinery					
		MSc. Mech. Engineering					
2019/20	Sapienza	Turbomachinery, MSc. Mech. Engineering					
2018/19	Sapienza	Energy Systems, BSc. Mech. Engineering					
2018/19	Sapienza	Advanced Energy Conversion Systems, MSc. Mech and Env.					
		Engineering					
2017/18	Sapienza	Turbomachinery (Complementi di Macchine), MSc. Mech.					
		Engineering					
2017/18	Sapienza	Energy Systems, BSc. Mech. Engineering					
2017/18	Sapienza	Turbomachinery (Complementi di Macchine), MSc. Mech.					
		Engineering					

Innovative teaching experience

- Online webinars:
 - "Introduction to Machine Learning For Turbomachinery and Energy Systems" (International Gas Turbine Institute, ASME TurboExpo 2020). https://event.asme.org/Turbo-Expo-2020/Program-(1)/Tutorials-of-Basics
- Development of Python-driven lectures on Jupyter notebooks platform (jupyter.org) for:
 - Energy Systems, (BSc course in Mechanical Engineering, Sapienza University of Rome)
 - o Turbomachinery, (MSc course in Mechanical Engineering, Sapienza University of Rome)
 - o Computational Thermo-Fluids Analysis in Fluid Machinery (MSc course in Mechanical

- Engineering, Sapienza University of Rome)
- Modelling of Energy Conversion Systems Laboratory with TRNSYS (MSc course in Mechanical Engineering, Sapienza University of Rome)

Other teaching activities

2007-2016

- Practical and tutorial sessions, Computational Thermo-Fluids Analysis in Fluid Machinery (MSc course in Mechanical Engineering, Sapienza University of Rome), dedicated to student training in numerical modeling for fluid machinery in energy conversion systems.
- Tutorial sessions, Advanced Energy Conversion Systems (MSc course in Mechanical Engineering and Energy Engineering, Sapienza University of Rome)

Thesis supervisor

Dept. of Mechanical and Aerospace Engineering

2010-today

Supervisor of 3 MSc Theses on turbomachinery, co-supervisor of over 25 MSc and 10 BSc theses on energy systems and turbomachinery

Invited keynotes and lecture series

- Lecturer of OpenFOAM basics at the Flaktwoods Engineering Conference 2011 to 2013
- Lecturer of Energy Conversion Systems, Tirreno Power 2010

Part V - Society Memberships, Awards and Honors

Memberships

•	ASME	2013-today
•	AIMSEA	2017-today
•	Italian Society of Engineers (Albo degli Ingegneri)	2009-today

Awards

• Best student presentation at 6th International Symposium on Turbulence, Heat and Mass Transfer, 2009

Honors

•	Chair of the Fans & Blowers Technical Committee for IGTI-ASME	2020-today
•	Member of the Editorial Board of Int. J. of Aerospace Engineering	2018 -today
•	Point contact and vice-chair of the Fans & Blowers Committee	
	IGTI-ASME	2013-2020
•	Co-chairman at ATI Conference	2020
•	Member of the Scientific Advisory Committee for International	2013-2018
	Symposium on Fans	
•	Reviewer for scientific journals, conferences and research programs	2011-today
	Dear neviewer for scientific issumple like I of Elvide Engineering	I Darrian and

- Peer-reviewer for scientific journals like J. of Fluids Engineering, J. Power and Energy, Periodica Polythecnica, Flow Turbulence and Combustion and many others
- Peer-reviewer for international conferences like ASME TurboExpo, Fans International

- Symposium, THMT and many others.
- Peer-reviewer for ISCRA Program (CINECA/EU).

Part VI - Funding Information

- 2012 Principal Investigator of OWC-WT Project under ISCRA Programme, CINECA (grant HP10B6ONLZ), 2.0M CPU-hours
- 2012 Principal Investigator of "Hybrid LES/RANS investigation of industrial fan subjected to pressure pulses", Standard HPC Grant Caspur (100.000 CPU-hours)
- 2011 Principal Investigator of ICAWHALE Project under ISCRA Programme, CINECA (grant HP10CRND86), 0.5M CPU-hours
- 2009 Principal Investigator of PINLES2 Project under HPC-Europa2 Programme, CINECA (virtual visit @SARA, Amsterdam + 0.5 M CPU hours)
- 2008 Principal Investigator of PINLES Project under HPC-Europa++ Programme, CINECA (Grant + 0.5 M CPU hours)

Part VII - Research Activities

Machine Learning in Energy conversion systems

- AI-driven hydrogen leak analysis for GT enclosure safety certification
- Data driven approach for gas-turbine (in collaboration with Baker Hughes, Firenze)
- Data driven approach for wall function, turbulence modelling and flow analysis of turbomachinery flows and heat transfer
- DANGER: Data-driven ANalysis of tip Gap effects on turbine heat transfer and aERodynamics (in collaboration with von Karman Institute)
- Noise emission analysis in axial fans with unsupervised machine learning techniques (in collaboration with FAU, Friedrich-Alexander Universitat, Erlangen-Nurnberg)

Renewable Energies

- Minimized water consumption in CSP plants, MinWaterCSP Project, Horizon2020.
 - Increase the net annual power output of CSP plants by up to 2% and reduce the water consumed for cooling by 75-95% with hybrid dry/wet cooling technology
 - Reduce auxiliary power consumption of the cooling system by improving fan efficiency
 - Reduce water consumption during mirror cleaning by 25%
- Characterization of hydroelectric potential of a natural reserve and development of an innovative mini-hydro turbine (in collaboration with Fondazione Caetani, Giardini di Ninfa)
- Development of a Wells turbine for Mediterranean operations (in collaboration with Faggiolati Pumps S.p.A.)
- Performance mapping of innovative solar tracker under severe wind conditions, (in collaboration with Convert S.p.A.)

Modelling of Energy Systems and Turbomachinery

Synthetic models for matching of components and systems in digital twins in standard (ISO or AMCA) arrangements or real-life layouts (collaboration with GE Oil&Gas, Baker Hughes,

ENEL)

- Development of innovative models for heat transfer in gas turbines and secondary flows in compressor cascades with LES, hybrid LES/RANS and URANS (Awarded best student presentation at 6th International Symposium on Turbulence, Heat and Mass Transfer, 2009)
- OpenFOAM Library: implementation, assessment and validation of:
 - advanced turbulence models for URANS, LES and hybrid LES/RANS
 - advanced solvers for turbulent flows and heat transfer
 - synthetic models for turbomachinery simulation
 - machine-learnt models for wall-functions and turbulence models

Flow control strategies in fluid machinery

- Study and development of a biomimicry-derived stall control system for axial flow fans (in collaboration with FlaktWoods AB, patented)
- Study, development and assessment of innovative casing treatments for stall control in axial flow fans (in collaboration with FlaktWoods AB)
- Study and development of innovative flow control strategy to nullify axial trust in multistage pumps (in collaboration with Ebara Corp. Europe, patented)

Relevant Research Skills

- Modelling of energy systems in with renewable and conventional energy sources using TRNSYS and Python
- Application of machine learning to turbomachinery optimization and turbulence and heat transfer modelling using Sci-kit learn and TensorFlow.
- Deep knowledge of numerical methods for Computational Fluid Dynamics (CFD):
 - Finite Elements
 - Finite Volumes
 - Discretization techniques
 - Steady-state and time-advancing solutions
- Deep knowledge of advanced turbulence modelling
- Experience in flow survey analysis to derive industrially relevant solutions for turbomachinery in the fields of:
 - efficiency optimization / energy saving
 - noise reduction
 - stall control
 - mechanical stress reduction
 - flow control
- Experience in deriving flow control solutions exploiting cross-fertilization strategies
- Deep knowledge of C++, F90 and MPI parallelization applied to CFD, in particular derived by working on in-house CFD codes (T-FlowS, Xenios) and open-source CFD (OpenFOAM)
- Deep knowledge of HPC computing for CFD
- Deep knowledge of Fortran, C++, MPI, Python, Matlab, OpenFOAM

Giovanni Delibra - Curriculum Vitae et Studiorum for web

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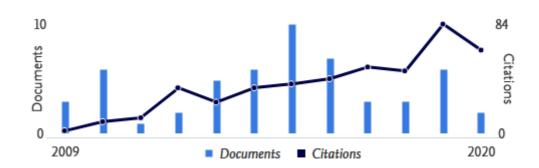
<u>Part VIII - Summary of Scientific Achievements (data extracted from IRIS and Scopus on Dec. 21st 2020)</u>

- Total Impact Factor: 11.422 (Data from IRIS, field: "Scopus: SJR")
- Average Impact Factor: 1.04 (Total Impact Factor / 11)
- Total Documents: 54 (Scopus)
- Total Citations: 445 in 310 documents (Scopus)
- Average Citations per Product: 8.24 (Scopus)
- H-index: 10 (Scopus)
- Average H-index per year (1st publication on Scopus dates to 2009): 0.91
- Co-authors: 35 (Scopus)

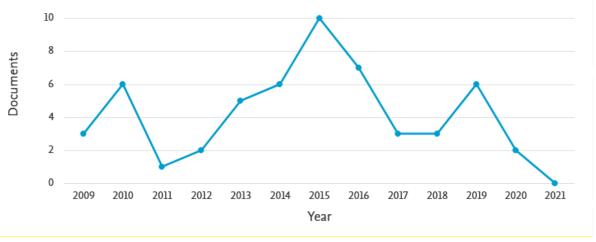
Patents

- Patent for "Impeller for a pump". 2017/1/10 US D776166.
- Patent for "Impeller for pumps". 2017/7/11 US D791841.
- Patent for "Impeller assembly for centrifugal pumps". International publication number WO-2016/060221
- Patent for "Air movement fan with protrusions on the leading and trailing edges of the blades". GB2507493 (A)

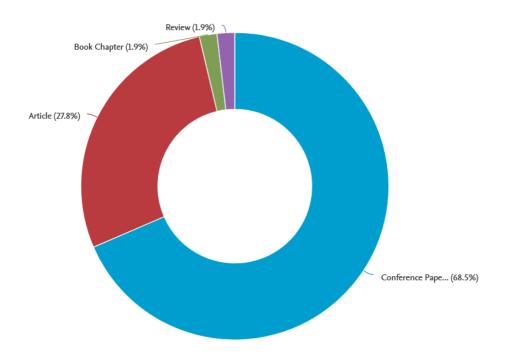
Bibliometric profile from Scopus



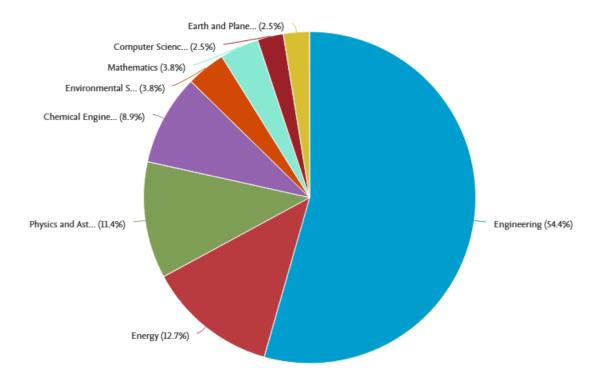
Documents and citation trends (from Scopus)



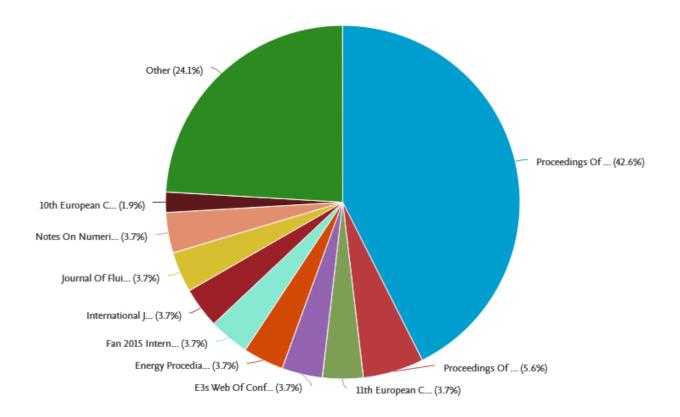
Documents by year (from Scopus)



Documents by type (from Scopus)



Documents by subject area (from Scopus)



Documents by source (from Scopus)

Part IX – 12 Journal Publications selected for the evaluation

- 1. Angelini, Corsini, Delibra, Tieghi, A multidimensional extension of Balje chart for axial flow turbomachinery using artificial intelligence-based meta-models, Journal of Engineering for Gas Turbines and Power, Volume 141, Issue 11, November 2019, Article number 4044935
- 2. Angelini, Corsini, Delibra, Tieghi, Exploration of axial fan design space with data-driven approach, J. Eng. Gas Turbines Power. Nov 2019, 141(11): 111012.
- 3. Angelini, Bonanni, Corsini, Delibra, Tieghi, Volponi. On Surrogate-Based Optimization of Truly Reversible Blade Profiles for Axial Fans, Designs 2018, 2(2), 19
- 4. Cardillo, L., Corsini, A., Delibra, G., Rispoli, F. and Tezduyar, T.E., 2016, Flow analysis of a wave-energy air turbine with the SUPG/PSPG stabilization and Discontinuity-Capturing Directional Dissipation, Computers & Fluids 2016
- 5. Rispoli F., Delibra, G., Venturini, P., Corsini, A., Saavedra,, R. and Tezduyar, T., Particle tracking and particle-shock interaction in compressible-flow computations with the V-SGS stabilization and Y Z β shock-capturing. Computational Mechanics, June 2015, Volume 55, Issue 6, pp 1201-1209
- 6. Hanjalic, K., Borello, D., Delibra, G., Rispoli, F., Hybrid LES/RANS of internal flows: A case for more advanced RANS, Notes on Numerical Fluid Mechanics and Multidisciplinary Design 130, pp. 19-35
- 7. Cardillo, L., Corsini, A., Delibra, G., Rispoli, F. and Sheard, A.G., 2013, A numerical investigation into the aerodynamic effect of pressure pulses on a tunnel ventilation fan, Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy

- Volume 228 Issue 3, May 2014 pp. 284 298
- 8. Corsini, A., Delibra, G, and Sheard, A.G., 2013, The application of sinusoidal blade-leading edges in a fan-design methodology to improve stall resistance, Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy May 2014 vol. 228 no. 3 255-271, 10.1177/0957650913514229
- 9. Borello, D., Corsini, A., Delibra, G., Fiorito, M. and Sheard, A.G., 2013, Large Eddy Simulation of a tunnel ventilation fan, J. Fluids Eng. 135(7), 071102 (Apr 17, 2013) (9 pages) doi:10.1115/1.4023686.
- 10. Corsini, A., Delibra, G., and Sheard, A.G., 2013, On The Role Of Leading-Edge Bumps In The Control Of Stall On-Set In Axial Fan Blades, J. Fluids Eng. 135(8), 081104 (Jun 05, 2013) (9 pages) doi: 10.1115/1.4024115.
- 11. Domenico Borello, Alessandro Corsini, Giovanni Delibra, Sara Evangelisti and Andrea Micangeli, 2012, Experimental and computational investigation of a new solar integrated collector storage system, Applied Energy 97 (2012) 982–989.
- 12. Delibra G., Borello D., Hanjalić K. and Rispoli F., 2010, Vortex structures and heat transfer in a wall-bounded pin matrix: LES with a RANS wall-treatment, Int. Journal for Heat and Fluid Flow 31 (2010) 740–753.

Journal Publications selected for the evaluation metrics

	Article Metrics				Journa	al Metrics		
#	Year	Citations	PP	F-WCI	Journal	H-index	Q	SJR
1	2019	0	64.8	0	J of Engineering for Gas Turbines and Power	81	1	0.62
2	2019	0	64.8	0	Int. J of Turbomachinery, Propulsion and Power	6	2	0.58
3	2018	1	98.64	0.15	Designs	NA	NA	NA
4	2016	13	92.321	0.83	Computer & Fluids	98	1	1.01
5	2015	49	92.321	3.65	Computational Mechanics	97	1	2.08
6	2015	7	91.223	0.94	Notes on Numerical Fluid Mechanics and Multidisciplinary Design	21	4	0.25
7	2014	4	77.948	0.27	J. Power & Energy	56	2	0.55
8	2014	17	77.043	0.81	J. Power & Energy	56	2	0.55

9	2013	16	90.272	1.78	J. of Fluids Engineering	98	1	0.72
10	2013	49	77.043	2.58	J. of Fluids Engineering	98	1	0.72
11	2012	22	97.439	1.59	Applied Energy	189	1	2.78
12	2010	55	91.223	3.86	Int. Journal of Heat and Fluid Flow	104	1	1.53

Legenda

#, refers to previous list of 12 selected publications

PP, SciVal Topic Prominence Percentile (Shows how citations received by this document compare with the average for similar documents), source Scopus.

F-WCI, Field-Weighted Citation Impact (Shows how well this document is cited when compared to similar documents. A value greater than 1.00 means the document is more cited than expected), source Scopus.

Part X – List of further Journal Publications (does not include those selected in Part IX)

- 1. Tieghi, L., Corsini, A., Delibra, G, Angelini, G., 2020, Assessment of a Machine-Learnt Adaptive Wall Function in a Compressor Cascade with Sinusoidal Leading Edge. J. of Engineering for Gas Turbines and Power, 2020, Vol 142. GTP-20-1311.
- 2. Corsini, A., Delibra, G., Di Meo, G., Martini, M., Rispoli, F. and Santoriello, A., 2015, A CFD-based Virtual Test-rig for Rotating Heat Exchangers, Energy Procedia Volume 82, December 2015, Pages 245–251
- 3. Cardillo, L., Corsini, A., Delibra, G., Rispoli, F., Sheard, A.G. and Venturini, P, 2014, Predicting the Performance of an Industrial Centrifugal Fan Incorporating Cambered Plate Impeller Blades, Periodica Polytechnica, Vol 58, No 1 (2014), pp. 15-25.
- 4. Corsini, A., Delibra, G. and Sheard, A. G., "A Critical Review of Computational Methods and Their Application in Industrial Fan Design," ISRN Mechanical Engineering, vol. 2013, Article ID 625175, 20 pages, 2013. doi:10.1155/2013/625175
- 5. Borello D., Delibra G., Hanjalić K. and Rispoli F., 2010, Scrutinizing a seamless hybrid LES/RANS approach for turbomachinery applications, short communication, In 3rd Symp. on Hybrid RANS-LES Methods, Gdansk, Poland. In H.H. Peng and W. Haase (edts): Advances in Hybrid RANS-LES Modelling, Springer Notes on Numerical Fluid Mechanics and Multidisciplinary Design.
- 6. Borello, D., Delibra, G., Hanjalić, K. and Rispoli, F., 2010, LES and hybrid LES/RANS study of flow and heat transfer in plate fin and tube heat exchanger, In: J. Peinke, M. Oberlack and A. Talamelli (Eds) Progress in Turbulence III (Proceedings of the iTi Conference in Turbulence, Bertinoro, Italy), Springer, ISBN 9783642022241.
- 7. Delibra, G., Borello, D., Hanjalić, K. and Rispoli, F., 2010, LES of flow and heat transfer in a channel with a staggered cylindrical pin matrix, In: V. Armenio, B. Geurts and J. Froelich (Eds) Direct and Large-eddy Simulation VII (Proc. 7th Int. ERCOFTAC Workshop, Trieste), Springer Science and Media B.V, ISBN 978-90-481-3651-3.
- 8. Delibra G., Borello D., Hanjalić K. and Rispoli F., 2009, URANS of flow and endwall heat

- transfer in a pinned passage relevant to gas-turbine blade cooling, Int. J. Heat Fluid Flow, Vol. 30, pp. 549-560.
- 9. Borello D., Delibra G., Hanjalić, K. and Rispoli, F., 2009, Large-eddy simulations of tip leakage and secondary flows in an axial compressor cascade using a near-wall turbulence model, Proc. Institution of Mech. Engineers, Pt A J. Power and Energy, Vol. 223 (A6 SI), pp. 645-655.

Part XI – Complete list of Conference papers

- 1. Angelini G., Bonanni T., Corsini A., Delibra G., Tieghi L., Volponi D., Effects of Fan Inflow Distortions on Heat Exchange in Air-Cooled Condensers. Unsteady Computations with Synthetic Blade Model, Proceedings of the ASME TurboExpo 2018, GT2018-76518.
- 2. Bonanni, Volponi, Corsini, Delibra, Tieghi, Angelini, A metamodel for deviation in 2D cascade with variable stagger and solidity and reversible profiles, Proceedings of the ASME TurboExpo 2018 GT2018-76363
- 3. Cardillo, Corsini, Delibra, Sheard, Tieghi. The Use of Serrated Leading Edge for Inflow Conditioning in Centrifugal Fan. Proceedings of Fan2018 Symposium, Darmstadt (Germany), 18 20 April 2018.
- 4. Volponi, Bonanni, Tieghi, Delibra, Corsini, Wilkinson, Van Der Spuy, Von Backström. CFD Simulation Results for the MinwaterCSP Cooling Fan. Proceedings of Fan2018 Symposium, Darmstadt (Germany), 18 20 April 2018.
- 5. Volponi, Bonanni, Angelini, Tieghi, Delibra, Corsini, Wilkinson, Van Der Spuy, Von Backström. Rapid Prototyping and Testing of a Small Scale Fan for CSP Power Plant Applications. Proceedings of Fan2018 Symposium, Darmstadt (Germany), 18 20 April 2018.
- 6. Angelini, Volponi, Wilkinson, Van Der Spuy, Bonanni, Tieghi, Delibra, Corsini, Von Backström. Noise Reduction of a Large Axial Flow Fan for CSP Air-Cooled Condensers. Proceedings of Fan2018 Symposium, Darmstadt (Germany), 18 20 April 2018.
- 7. T. Bonanni, A. Corsini, G. Delibra, D. Volponi, A. G. Sheard and M. Bublitz, 2017, Design of a Single Stage Variable Pitch Axial Fan, Proceedings of the IGTI ASME TurboExpo 2017, GT2017- 64517
- 8. T. Bonanni, A. Corsini, G. Delibra, D. Volponi, 2017, Development and Validation of a Novel Synthetic Blade Model for Axial Flow Fans in Unsteady CFD, Proceedings of the IGTI ASME TurboExpo 2017, GT2017-63952
- 9. Borello D., Cardillo, L., Corsini A., Delibra G., Rispoli F., Salvagni A., Sheard A. G., Venturini P., Modelling of Particle Transport, Erosion And Deposition In Power Plant Gas Paths, Proceedings of the IGTI ASME TurboExpo 2016, GT2016-57984
- 10. Breviario F., Brivio D., Cardillo, L., Corsini A., Delibra G. Flow Survey of Forward Curved Blades Centrifugal Fan For HVAC Applications, Proceedings of the IGTI ASME TurboExpo 2016, GT2016-57820
- 11. Bonanni T., Cardillo, L., Corsini A., Delibra G., Sheard A. G., Volponi D., Derivative Design Of Axial Fan Range: From Academia To Industry, Proceedings of the IGTI ASME TurboExpo 2016, GT2016-57469
- 12. Corsini A., Delibra G., Sheard A. G., Volponi D., Experimental Investigation On Double

- Anti-Stall Ring Effects On Reversible Ventilation Fan Performance, Proceedings of the IGTI ASME TurboExpo 2016, GT2016-57474
- 13. Bonanni T., Corsini A., Delibra G., Sheard A. G., Volponi D., Modelling Of Axial Fan And Anti-Stall Ring On A Virtual Test Rig For Air Performance Evaluation, Proceedings of the IGTI ASME TurboExpo 2016, GT2016-56862
- 14. Cardillo, L., Corsini, A., Delibra, G. And Volponi, D., Axial flow fan design experience for a project based turbomachinery class, under revision for TurboExpo2015
- 15. Corsini, A., Delibra, G., Sheard, A. G. And Volponi D., Unsteady pressure interaction of an axial flow fan with a stabilization ring in tunnel and metro applications, under revision for TurboExpo2015
- 16. Corsini, A., Delibra, G., Minotti, S. And Rossin, S., Numerical assessment of fan-ducting coupling for gas turbine ventilation systems, under revision for TurboExpo2015
- 17. Corsini, A., Delibra, G., Rispoli, F. And Sheard, A. G., Aeroacoustic assessment of leading edge bumps in industrial fans by means of hybrid LES/RANS abstract accepted to Fan2015 Conference
- 18. Corsini, A., Delibra, G., Minotti, S. And Rossin, S., Assessment and validation of a syntetic model for fans simulations in CFD, abstract accepted to Fan2015 Conference
- 19. Bassetti, M., Corsini, A., Delibra, G., Rispoli, F. and Venturini, P., Design and verification of a micro Wells turbine for Mediterranean operations, under revision for ETC 2015.
- 20. Corsini, A., Delibra, G. and Sciulli, F., Optimisation and re-design of a snow gun fan, under revision for ETC 2015.
- 21. Cardillo, L., Corsini, A., Delibra, G., Rispoli, F., Sheard, A.G. and Venturini, P., 2014, Simulation of particle-laden flows in a large centrifugal fan for erosion prediction, Proceedings of the IGTI TurboExpo 2014, GT2014-25865.
- 22. Corsini, A., Delibra, G., Rispoli, F., Sheard, A.G. and Volponi, D., 2014, Investigation on anti-stall ring aerodynamic performance in an axial flow fan, Proceedings of the IGTI TurboExpo 2014, GT2014-25794.
- 23. Corsini A, Delibra G, Sheard G., 2013, Leading Edge Bumps In Ventilation Fan, Proceedings of the IGTI TurboExpo 2013, GT2013-94853.
- 24. Corsini A, Delibra G, Sheard G., Rispoli, F. and Venturini, P., 2013, Aerodynamic simulation of a high-pressure centrifugal fan for process industries, Proceedings of the IGTI TurboExpo 2013, GT2013-94982
- 25. Borello, D., Corsini A, Delibra G, Rispoli, F. and Sheard G., 2013, Numerical Investigation On The Aerodynamics Of Atunnel Ventilation Fan During Pressure Pulses, Proceedings of the European Turbomachinery Conference 2013, Lappearanta (Finland).
- 26. F. Arena, M. Bassetti, A. Corsini, G. Delibra, G. Faggiolati, S. Piccinini, F.Rispoli, G. Romani, A. Romolo, M. Ruggeri, E. Tuccimei and P.Venturini, 2012, An integrated procedure for the design of a Wells turbine developed for Mediterranean operation. OWEMES Int. Conference. Sept. 2012, Rome
- 27. Corsini A, Delibra G, Sheard G., 2012, On the role of leading-edge bumps in the control of stall on-set in axial fan blades. In: Proceedings of Fan 2012. Senlis, France, 18/04/2012
- 28. Borello D, Delibra G, Bianchini C, Andreini A., 2012, Unsteady Cfd Analysis Of Turbulent Flow And Heat Transfer In A Gas Turbine Blade Trailing Edge Subjected To Rotation. In:

- ASME Turbo Expo 2012 (GT 2012). Copenhagen, Denmark, June 11-15
- 29. D. Borello, G. Delibra, F. Rispoli (2011). Multiscale Partially Averaged Navier Stokes approach for the prediction of flow in linear compressor cascade with moving casing. In: ASME Turbo Expo 2011. ASME, Vancouver, June 2011
- 30. Borello, D., Delibra, G., Hanjalić, K. and Rispoli, F., 2010, Hybrid LES/RANS study of turbulent flow in a low speed linear compressor cascade with moving casing, draft accepted for ASME Turbo EXPO 2010 conference, 14-18 June, Glasgow, UK.
- 31. Borello, D., Delibra, G., Hanjalic, K. and Rispoli, F., 2010, LES Study of the Effect of Inflow Conditions on Heat Transport in Flow over a Wall-bounded Short Cylinder, 8th Int. ERCOFTAC Symp. on Engineering Turbulence Modelling and Measurements, ETMM8, 9 11 June 2010, Marseille, France.
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