

PERSONAL INFORMATION

Sergio Montelpare



 59, Via Montecesa, Osimo (AN), 60027, Italy
 +39 071 9710121  +39 328 1673023
 s.montelpare@unich.it
 Skype sergio.montelpare

Sex Male | Date of birth 04/01/1973 | Nationality Italian

CURRENT POSITION

Associate Professor of Applied Thermodynamics and Heat Transfer
 University "G. d'Annunzio" of Chieti-Pescara (Italy)
 2016 - present

WORK EXPERIENCE

- 01/10/2016 - Present **Associate Professor of Applied Thermodynamics and Heat Transfer (ING-IND/11)**
 University "G. d'Annunzio" of Chieti-Pescara (Italy)
 Department of Engineering and Geology (INGEO)
 42, Viale Pindaro, 65127, Pescara (Italy)
- 01/11/2012 – 30/09/2016 **University Researcher of Applied Thermodynamics and Heat Transfer (ING-IND/11)**
 University "G. d'Annunzio" of Chieti-Pescara (Italy)
 Department of Engineering and Geology (INGEO)
 42, Viale Pindaro, 65127, Pescara (Italy)
- 21/12/2005 – 31/10/2012 **Engineering technician**
 Polytechnic University of Marche (Italy)
 Department of Industrial Engineering and Mathematical Sciences (DIISM)
 01, Via Brecce Bianche, 60100, Ancona (Italy)
- 01/11/2001 – 31/10/2005 **Research fellow in Applied Thermodynamics and Heat Transfer (ING-IND/10)**
 Polytechnic University of Marche (Italy)
 Department of Industrial Engineering and Mathematical Sciences (DIISM)
 01, Via Brecce Bianche, 60100, Ancona (Italy)

EDUCATION AND TRAINING

- 01/11/1998 – 31/10/2001 **Ph.D. in Applied Thermodynamics and Heat Transfer**
 Polytechnic University of Marche (Italy)
 Department of Industrial Engineering and Mathematical Sciences (DIISM)
 ▪ Ph.D. thesis defended in date 04/12/2001
- November 1998 **Licensed in Engineering**
 Polytechnic University of Marche (Italy)
- 1992– 1998 **Master Degree in Mechanical Engineering**
 Polytechnic University of Marche (Italy)
 ▪ Thesis defended in date 04/11/1998 with a final grade of 110/110 *cum laude*

ACCADEMIC COURSES

- a.a. 2019 – 2020 **Applied Thermodynamics and Heat Transfer
 Acoustic and Lighting**
 University "G. d'Annunzio" of Chieti-Pescara (Italia)

- a.a. 2018 – 2019 **Applied Thermodynamics and Heat Transfer
Acoustic and Lighting**
University “G. d’Annunzio” of Chieti-Pescara (Italia)
- a.a. 2017 – 2018 **Applied Thermodynamics and Heat Transfer
Acoustic and Lighting**
University “G. d’Annunzio” of Chieti-Pescara (Italy)
- a.a. 2016 – 2017 **Applied Thermodynamics and Heat Transfer
Acoustic and Lighting**
University “G. d’Annunzio” of Chieti-Pescara (Italy)
- a.a. 2015 – 2016 **Applied Thermodynamics and Heat Transfer**
University “G. d’Annunzio” of Chieti-Pescara (Italy)
- a.a. 2014 – 2015 **Applied Thermodynamics and Heat Transfer
Acoustic and Lighting**
University “G. d’Annunzio” of Chieti-Pescara (Italy)
- a.a. 2013 – 2014 **Applied Thermodynamics and Heat Transfer**
University “G. d’Annunzio” of Chieti-Pescara (Italy)
- a.a. 2012 – 2013 **Applied Thermodynamics and Heat Transfer
Renewable Energies Production**
University “G. d’Annunzio” of Chieti-Pescara (Italy)

ACCADEMIC ROLES

Chairman of the Bachelor's Degree in Building Engineering L23

from 29/11/2019 for the 2019/2020 – 2021/2022 triennium

Member of the “Research Committee” of the University “G. d’Annunzio”

18/09/2019 - present

Representative of Energy Workgroup for the “Italian University Network for Sustainable Development (RUS)” of the University “G. d’Annunzio”

15/04/2019 - present

Member of the “Committee for Research Evaluation and Technological Transfer (CVRTT)” of the University “G. d’Annunzio”

10/04/2019 - present

RESEARCH PROJECTS

- Participation to the ReLUIIS project from 24/02/2017
- Participation to the POWERED Project ("Project of Offshore Wind Energy: Research, Experimentation, Development") Adriatic IPA Cross Border Cooperation 2007-2013 Programme
- Participation to the "Industria 2015 - Generator Project" financed by the Italian Ministry of Economic Development. Proposal for "Energy Efficiency" – cod. EE01_00054.
- Participation to PRIN 2007: "Innovative techniques for the forced convection heat transfer increase".
- Participation to PRIN 2005: "Innovative techniques for the forced convection heat transfer increase".
- Participation to PRIN 2002: "Techniques for the increase of the forced convection heat transfer".
- Participation to PRIN 1999: "Techniques for the efficiency increase of thermos-fluid dynamic processes".

RESEARCH ACTIVITIES

HEAT TRANSFER

Study, by means of infrared thermography, of the convective heat transfer coefficient of small aspect ratio liquid cooled pin fins. Results of this research was published on international journals and offer experimental correlations for the design of small aspect ratio pin fins by varying the Reynolds number and the pin shape geometry.

THERMO FLUID-DYNAMIC OF EXTERNAL FLOWS

This research was aimed to analyse the local laminar boundary layer separation phenomenon named "Laminar Bubble". This is normally observed on aerodynamic surfaces operating at low Reynolds numbers and also on wind turbine blades. My research began with the development of an innovative thermographic approach able to qualitatively analyse the Laminar Bubble phenomenon and then became to a quantitative analysis. This research was published on several international papers and was also illustrated to international conferences.

ENVIRONMENTAL FLUID DYNAMIC

This research was aimed to analyse interactions among wind, buildings and complex terrains. My research was preliminary focused to set up all the experimental facilities available at the Environmental Wind Tunnel of the University of Ancona, later to the experimental analyses of several wind-structures interactions. These researches were published on international journals and conference proceedings.

THERMO FLUID-DYNAMIC OF INTERNAL FLOWS

This research was focused on the numerical and experimental analysis of the Ranque-Hilsch vortex tube. Numerical results were published on international journals and conference proceedings.

WIND TURBINE ANALYSIS

My research was focused on horizontal and vertical axis wind turbines. A coupled experimental and numerical approach was developed to better analyse their fluid dynamic behaviour. The results of this research were published on international journals and conference proceedings.

WIND ENERGY ASSESSMENT

My research was devoted to developing a meso/micro-scale numerical approach able to offer a complete wind energy assessment. Several custom scripts were realized to obtain wind maps, virtual mast anemometers and statistical wind roses for every point of the simulated domains. Results of this research were presented at several international conferences and some papers are, at present, under peer review of international journals. A large part of this research was developed in acknowledgment to the POWERED IPA-European Project. Neural networks combined with the meteorological numerical approach were used to produce short term forecasts of wind farms energy production.

SOLAR ENERGY ASSESSMENT

This research was developed in parallel with the wind energy assessment by using the same MM5 meteorological code but with different post processing scripts, to analyse different output parameters. The aim of this research was focused on energy forecast for photovoltaic systems.

BUILDING THERMAL ANALYSES

Another field of research developed from my master degree to now is concerning about thermal analysis of building structures by means of experimental techniques, like thermography, and of numerical approaches.

ACOUSTIC ANALYSES

Since 2006 I have begun to deal with acoustic issues by analysing the interactions between sound waves and fluid dynamics of wind sections. Subsequently, acoustic analyses have been extended to noise measurements in wind farms, also with predictive simulations of the wind impact of multi megawatt wind turbines. Since 2012 they were activated research lines inherent to noise in work environments, to the reduction of noise emissions from gas turbine systems, to acoustic building

phenomena and to the acoustics of the theatres and churches.

ADDITIONAL INFORMATION

Certifications

- **3° Level RINA operator in “Acoustics and Vibrations”** (September 2016) Level 3 non-destructive testing operator in accordance with UNI EN ISO 9712 last edition and RINA RC / C.14 regulation. In the Acoustic and Vibration Method. Validity from 06/06/2016 to 06/06/2021
- **“Competent Engineer in Environmental Acoustics”** in accordance with paragraphs 6 and 7, Article 2 of Law 26/10/1995 n. 447 by decree of the Manager of P.F. Protection of the Environmental Resources of the Marche Region n. 88 of 10/07/2015

Specialisation Courses

- DesignBuilder Detailed HVAC & CFD (Pescara, 14-16 February; 26 March 2018)
- DesignBuilder (Pescara, 17-18 March 2015).
- STAR-CCM+ for thermo-fluid dynamics (Ancona 26-28 January 2010).
- Labview DAQ advanced course (Ancona 4-6 December 2007).
- 5° UIT Summer School on “Turbulent flows thermo-fluid dynamics” (Certosa di Pontignano, 4-10 September 2005).
- Flovent and Flotherm basic courses (Ancona, 10-12 September 2003).
- 4° UIT Summer School on “Experimental techniques in thermo-fluid dynamics” (Certosa di Pontignano, 1-6 September 2003).
- Labview DAQ intermediate course (Ancona, 27-29 January 2003).□
- Labview basic course (Ancona, 4-6 November 2002).□
- 3° UIT Summer School on “Computational thermo-fluid dynamics” (Certosa di Pontignano, 2-8 September 2001).
- Short Course of Prof. Avram Bar-Cohen in the “Workshop on the thermal investigations of ICs and microstructures (THERMINIC 99)” (Roma, October 1999).
- 2° UIT Summer School on “Two-phase thermo-fluid dynamics” (Certosa di Pontignano, 30 August - 3 September 1999).

Informatics Competences

- Programming Languages
 - Labview
 - Visual Basic
 - Matlab
 - Fortran
 - Php
 - NCAR Command Language
- Software applications
 - Computer Aided Design: Autodesk Autocad / Solid Edge / Autodesk Revit
 - Meteorological codes: MM5 / WRF
 - Wind Energy Assessment: Windfarm / Windsim
 - CFD Simulations: Fluent / Flotherm / Flovent / STAR-CCM+ / DesignBuilder
 - Geomapping: Mapinfo / GlobalMapper / Grass
- SO: Microsoft Windows / Linux / MacOS

PERSONAL SKILLS

Mother tongue Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	A2	B1	A2	A2	A2
German	A2	A2	A1	A1	A2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

PUBLICATIONS

Journals and Books

- 1) Silvero, F., Lops, C., Montelpare, S., Rodrigues, F., "Generation and assessment of local climatic data from numerical meteorological codes for calibration of building energy models", (2019) *Energy and Buildings*, 188-189, pp. 25-45.
- 2) Silvero, F., Rodrigues, F., Montelpare, S., "A parametric study and performance evaluation of energy retrofit solutions for buildings located in the hot-humid climate of Paraguay—sensitivity analysis", (2019) *Energies*, 12 (3), art. no. 427
- 3) Silvero, F., Rodrigues, F., Montelpare, S., Spacone, E., Varum, H., "The path towards buildings energy efficiency in South American countries", (2019) *Sustainable Cities and Society*, 44, pp. 646-665., DOI: 10.1016/j.scs.2018.10.028
- 4) Rizzo, F., Caracoglia, L., Montelpare, S., "Predicting the flutter speed of a pedestrian suspension bridge through examination of laboratory experimental errors", (2018) *Engineering Structures*, 172, pp. 589-613., DOI: 10.1016/j.engstruct.2018.06.042
- 5) Zazzini, P., Montelpare, S., Basti, A., "Climate dependence of energy saving strategies in public buildings characterized by change of use: An original case study", (2018) *Energy Efficiency*, 11 (2), pp. 499-519., DOI: 10.1007/s12053-017-9585-5
- 6) Montelpare, S., D'Alessandro, V., Zoppi, A., Ricci, R., "Experimental study on a modified Savonius wind rotor for street lighting systems. Analysis of external appendages and elements", (2018) *Energy*, 144, pp. 146-158., DOI: 10.1016/j.energy.2017.12.017
- 7) D'Alessandro, V., Binci, L., Montelpare, S., Ricci, R., "On the development of OpenFOAM solvers based on explicit and implicit high-order Runge–Kutta schemes for incompressible flows with heat transfer", (2018) *Computer Physics Communications*, 222, pp. 14-30., DOI: 10.1016/j.cpc.2017.09.009
- 8) F. Silvero, S. Montelpare, F. Rodrigues, E. Spacone, H. Varum, "Energy retrofit solutions for heritage buildings located in hot-humid climates", *Procedia Structural Integrity*, Volume 11, 2018, Pages 52-59, ISSN 2452-3216, <https://doi.org/10.1016/j.prostr.2018.11.008>.
- 9) D'Alessandro, V., Montelpare, S., Ricci, R., Zoppi, A., "Fluid–dynamic analysis of a multi-blade gravity damper", (2018) *International Journal of Mechanical Sciences*, 135, pp. 14-22., DOI: 10.1016/j.ijmecsci.2017.11.007V. D'Alessandro, F. Garbuglia, S. Montelpare, A. Zoppi. "A Spalart–Allamaras local correlation– based transition model for Thermal Fluid–Dynamics." *Journal of Physics: Conference Series*, Volume 923, Issue 1, 20 November 2017, Article number 012029
- 10) V. D'Alessandro, F. Garbuglia, S. Montelpare, A. Zoppi. "A Spalart–Allamaras local correlation– based transition model for Thermal Fluid–Dynamics." *Journal of Physics: Conference Series*, Volume 923, Issue 1, 20 November 2017, Article number 012029
- 11) L. Binci, G. Clementi, V. D'Alessandro, S. Montelpare, R. Ricci. "Study of the flow field past dimpled aerodynamic surfaces: Numerical simulation and experimental verification." *Journal of Physics: Conference Series*, Volume 923, Issue 1, 20 November 2017, Article number 012030
- 12) S. Montelpare, V. D'Alessandro, A. Zoppi, E. Costanzo. "A Solar Chimney for renewable energy production: thermo-fluid dynamic optimization by CFD analyses." *Journal of Physics: Conference Series*, Volume 923, Issue 1, 20 November 2017, Article number 012047
- 13) V. D'Alessandro, S. Montelpare, R. Ricci. (2017) "On the improvement of computational performance of a vapour–liquid equilibria solver for mixtures. *Theoretical Foundations of Chemical Engineering.*" *Theoretical Foundations of Chemical Engineering*, July 2017, Volume 51, Issue 4, pp 483–494. doi: 10.1134/S0040579517040170
- 14) V. D'Alessandro, S. Montelpare, R. Ricci. "An OpenFOAM solver for forced convection heat transfer adopting diagonally implicit Ruge–Kutta schemes." *Lecture Notes in Computers Science – Springer*.
- 15) V. D'Alessandro, S. Montelpare, R. Ricci, A. Zoppi. "Numerical modeling of the flow over wind turbine airfoils by means of Spalart–Allmaras local correlation based transition model." *Energy*, Vol. 130, 1 July 2017, pp. 402–419. 10.1016/j.energy.2017.04.134.
- 16) V. D'Alessandro, S. Montelpare, R. Ricci. "Detached–eddy simulations of the flow over a cylinder at $Re = 3900$ using OpenFOAM." *Computers and Fluids*. Vol. 136, 10 September 2016, pp. 152–169. doi:10.1016/j.compfluid.2016.05.031.
- 17) Renato Ricci, Roberto Romagnoli, Sergio Montelpare, and Daniele Vitali, "Experimental study on a Savonius wind rotor for street lighting systems", *APPLIED ENERGY* 161 (2016), 143–152.
- 18) Daniele Vitali, Renato Ricci, and Montelpare Sergio, An innovative wind-solar hybrid street-light: development and early testing of a prototype, *INTERNATIONAL JOURNAL OF LOW*

CARBON TECHNOLOGIES 10 (2015 December), no. 4, 420–429.

- 19) Mariano Tartuferi, Valerio D'Alessandro, Sergio Montelpare, and Renato Ricci, Enhancement of Savonius wind rotor aerodynamic performance: a computational study of new blade shapes and curtain systems, *ENERGY* 79 (2015 January), 371–384.
- 20) Renato Ricci, Valerio D'Alessandro, Sergio Montelpare, Lorenzo Binci, and Andrea Zoppi, An unsteady model for the simulation of the rapid depressurization of vessels containing two-phase mixtures in non-equilibrium conditions, *JOURNAL OF PHYSICS*. article SERIES 655 (2015), 1–10.
- 21) Renato Ricci, Roberto Romagnoli, Sergio Montelpare, and Daniele Di Benedetto, Convective heat transfer increase in internal laminar flow using a vibrating surface, *INTERNATIONAL JOURNAL OF THERMAL SCIENCES* 84 (2014 October), 358–368.
- 22) Andrea Crivellini, Valerio D'Alessandro, Daniele Di Benedetto, Sergio Montelpare, and Renato Ricci, Study of laminar separation bubble on low Reynolds number operating airfoils: RANS modelling by means of an high-accuracy solver and experimental verification, *JOURNAL OF PHYSICS*. article SERIES 501 (2014), 01–12.
- 23) Renato Ricci, Sergio Montelpare, and Enrico Renzi, Study of mechanical disturbances effects on the laminar separation bubble by means of infrared thermography, *INTERNATIONAL JOURNAL OF THERMAL SCIENCES* 50 (2011 November), no. 11, 2091–2103.
- 24) Valerio D'Alessandro, Sergio Montelpare, Renato Ricci, and Alessio Secchiaroli, Unsteady Aero- dynamics of a Savonius wind rotor: a new computational approach for the simulation of energy performance, *ENERGY* 35 (2010 August), no. 8, 3349–3363.
- 25) Renato Ricci, Alessio Secchiaroli, Valerio D'Alessandro, and Sergio Montelpare, Numerical simulation of turbulent flow in a Ranque-Hilsch vortex tube, *INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER* 52 (2009 November), no. 23-24, 5496–5551.
- 26) Alessio Secchiaroli, Renato Ricci, Sergio Montelpare, and Valerio D'Alessandro, Fluid dynamic analysis of a Ranque-Hilsch Vortex-Tube, *IL NUOVO CIMENTO C* 32 (2009 March), no. 2, 85–88.
- 27) Renato Ricci, Alessio Secchiaroli, Valerio D'Alessandro, and Sergio Montelpare, Numerical analysis of compressible turbulent helical flow in a Ranque-Hilsch vortex-tube, *WIT Transactions on Modelling and Simulation* 48 (2009), 353–364.
- 28) Renato Ricci and Sergio Montelpare, Analysis of boundary layer separation phenomena by infrared thermography - Use of acoustic and/or mechanical devices to avoid or reduce the laminar separation bubble effects, *Quantitative InfraRed Thermography Journal* 6 (2009), no. 1, 101–125.
- 29) Renato Ricci, Sergio Montelpare, and Emanuele Silvi, Study of acoustic disturbances effect on laminar separation bubble by IR thermography, *EXPERIMENTAL THERMAL AND FLUID SCIENCE* 31 (2007 February), no. 4, 349–359.
- 30) Renato Ricci and Sergio Montelpare, An experimental IR thermographic method for the evaluation of the heat transfer coefficient of liquid-cooled short pin fins arranged in line, *EXPERIMENTAL THERMAL AND FLUID SCIENCE* 30 (2006 March), no. 4, 381–391.
- 31) R. Ricci and S. Montelpare, A quantitative IR thermographic method to study laminar separation bubble phenomenon, *INTERNATIONAL JOURNAL OF THERMAL SCIENCES* 44 (2005 August), no. 8, 709–719.
- 32) Sergio Montelpare and Renato Ricci, An experimental method for evaluating the heat transfer coefficient of liquid-cooled short pin fins using infrared thermography, *EXPERIMENTAL THERMAL AND FLUID SCIENCE* 28 (2004 October), no. 8, 815–824.
- 33) S. Montelpare and R. Ricci, A thermographic method to evaluate the local boundary layer separation phenomena on aerodynamic bodies operating at low Reynolds number, *INTERNATIONAL JOURNAL OF THERMAL SCIENCES* 43 (2004 March), no. 3, 315–329.
- 34) Renato Ricci, Sergio Montelpare, Alessio Secchiaroli, and Valerio D'Alessandro, Flow field assessment in a vertical axis wind turbine, *WIT Transactions on Engineering Sciences. Advances in Fluid Mechanics VIII* 69 (2010), 255–266.
- 35) Renato Ricci and Sergio Montelpare, *Energie Alternative*, in *Pianificare la ricostruzione. Sette esperienze dall'Abruzzo*. (A. Clementi and A. di Venosa, eds.), Marsilio, Venezia, 2012.

Conference papers

- 1) V. D'Alessandro, G. Clementi, M. Falone, L. Giammichele, S. Montelpare, R. Ricci, "Passive boundary layer control on wind turbines blades using dimples", 36th UIT Heat Transfer Conference, 25-27 June 2018, Catania, Italy
- 2) S. Montelpare, V. D'Alessandro, C. Lops, E. Costanzo, R. Ricci, "A Mesoscale-Microscale approach for the energy analysis of buildings", 36th UIT Heat Transfer Conference, 25-27 June 2018, Catania, Italy

- 3) F. Silvero, S. Montelpare, M.F.S. Rodrigues, E. Spacone, H. Varum, "Energy retrofit solutions for heritage buildings located in hot-humid climates", CINPAR 2018 - Buildings Pathology and Construction Repair, Florence, Italy, June 2018.
- 4) C. Lops, S. Montelpare, G. Camata, "The Integrated Structural, Energetic and Architectural Approach for a Sustainable Requalification of Reinforced Concrete Buildings", 16th European Conference on Earthquake Engineering, 18-21 June 2018 Thessaloniki, Greece.
- 5) F. Serpilli, S. Montelpare, V. Lori, C. Lops, "L'acustica della Cattedrale di Santa Maria Arabona: stato di fatto e ipotesi progettuale", 45° Convegno Nazionale AIA, 20-22 Giugno 2018, Aosta, Italy.
- 6) F. Silvero, M.F.S. Rodrigues, S. Montelpare, E. Spacone, H. Varum, "Reabilitação Energética De Um Edifício Patrimonial Do Centro Histórico De Assunção", 6ª Conferência sobre Patologia e Reabilitação de Edifícios – Patorreb, April 2018
- 7) S. Montelpare, V. D'Alessandro, A. Zoppi, E. Costanzo. A Solar Chimney for renewable energy production: thermo-fluid dynamic optimization by CFD analyses. UIT 2017
- 8) L. Binci, G. Clementi, V. D'Alessandro, S. Montelpare, R. Ricci. Study of the flow field past dimpled aerodynamic surfaces: numerical simulation and experimental verification. UIT 2017
- 9) V. D'Alessandro, F. Garbuglia, S. Montelpare, A. Zoppi. A Spalart–Allamaras local correlation– based transition model for Thermal Fluid–Dynamics. UIT 2017
- 10) Marano, Antonio and Montelpare, Sergio and Manobianco, Lucrezia "AWG System design: service and portable solar powered atmospheric water generator" Proceedings of the LeNSes Conference: Sustainable Energy for All by Design, September 28-30 2016, Cape Town, South Africa, pp.61-69
- 11) Valter Lori, Fabio Serpilli, Gianni Cesini, Erika Costanzo, Sergio Montelpare, and Giovanni Matoloni, Rilievo e caratterizzazione di alcuni teatri storici della regione Abruzzo, 43° Convegno Nazionale AIA (Alghero, Italy, May 25–27, 2016).
- 12) V. D'Alessandro, S. Montelpare, R. Ricci. Implementation and evaluation of DES models in OpenFOAM. Workshop "HPC enabling of OpenFOAM for CFD applications", CINECA, Casalecchio di Reno (BO), Italy; 06/04/2016.
- 13) Renato Ricci, Valerio D'Alessandro, Sergio Montelpare, Lorenzo Binci, and Andrea Zoppi, An unsteady model for the simulation of the rapid depressurization of vessels containing two-phase mixtures in non-equilibrium conditions, 33rd UIT Heat Transfer Conference (L'Aquila, Italy, June 22–24, 2015), Proceedings of 33rd UIT National Heat Transfer Conference, 2015, pp. 1–10.
- 14) Andrea Crivellini, Valerio D'Alessandro, Daniele Di Benedetto, Sergio Montelpare, and Renato Ricci, Study of laminar separation bubble on low Reynolds number operating airfoils: RANS modelling by means of an high-accuracy solver and experimental verification, 31st UIT Heat Transfer Conference (Como, Italy, June 25–27, 2013), Proceedings of 31st UIT Heat Transfer Conference, vol. 2, 2015, pp. 415–424.
- 15) Renato Ricci, Daniele Vitali, Sergio Montelpare, and Massimo Rossi, An innovative wind/solar hybrid street lighting system: development and early testing of a prototype, 3rd International Conference in Microgeneration and Related Technologies in Buildings (MICROGEN III) (Naples, Italy, April 15–17, 2013), Proceedings of the 3rd Edition of the International Conference on Microgeneration and Related Technologies, 2013, pp. 1–10.
- 16) Paolo Castellini, Gianni Cesini, Antonio Iannotti, Valter Lori, Milena Martarelli, Sergio Montelpare, Renato Ricci, Fabio Serpilli, Francesca Sopranzetti, and Enrico Paolo Tomasini, Strumenti e metodi di misura per la caratterizzazione acustica e vibrazionale di turbine eoliche, Seminario AIA "Strumenti e metodi di misura in acustica" (Ancona, Italy), 2012, pp. 1–13.
- 17) Renato Ricci, Roberto Romagnoli, Sergio Montelpare, and Alessio Secchiaroli, The enhancement of convective heat transfer in internal laminar flow by vibrating surfaces, Proceedings of the ASME-ATI-UIT 2010 Conference on thermal and environmental issues in energy systems 2 (2010), 1125–1130.
- 18) Renato Ricci, Sergio Montelpare, Gaetano Borrelli, and Valerio D'Alessandro, Experimental analysis of a Savonius wind rotor for street lighting systems, Proceedings of the ASME-ATI-UIT 2010 Conference on thermal and environmental issues in energy systems I (2010), 603–607.
- 19) Alessio Secchiaroli, Renato Ricci, Sergio Montelpare, Valerio D'Alessandro, and Gianluca Artipoli, Numerical Simulations of Turbulent Helical Flow in a Ranque-Hilsch Vortex Tube with different RANS closures and Sub-Grid Scales Models, Proceedings of 6th International Conference on Computational Heat and Mass Transfer (ICCHMT09) (2009), 330–337.
- 20) Sergio Montelpare, Renato Ricci, Valerio D'Alessandro, and Giuseppe Di Giovine,

- Aerodynamics of a Savonius wind rotor, VKI CONF 2009-01, ICFDEX09: 4th Symposium on Integrating CFD and Experiments in Aerodynamics (2009), 1–19.
- 21) Renato Ricci, Marco Mazzieri, Alessio Secchiaroli, Sergio Montelpare, and E. Savelli, Raffreddamento di componenti elettronici di potenza mediante dispositivi ad effetto Ranque-Hilsch: simulazione numerica del flusso interno ed esterno, Atti del XXVI Congresso Nazionale UIT sulla Trasmissione del Calore (2008), 527–532.
 - 22) Renato Ricci, Sergio Montelpare, Gianluca Artipoli, and Enrico Renzi, Thermographic analysis of mechanical disturbances effects on laminar separation bubble, QIRT 2008 Proceedings 1 (2008), 301–313.
 - 23) Renato Ricci and Sergio Montelpare, Analisi mediante termografia IR dei fenomeni di separazione dello strato limite su corpi aerodinamici, Tecniche Ottiche e Termografiche in Termofluidodinamica, III Giornata Nazionale di Studio UIT (2008), 1–12.
 - 24) Fabio Serpilli, Gianni Cesini, Antonio Iannotti, Sergio Montelpare, and Renato Ricci, Valutazione di impatto acustico del parco eolico regionale marchigiano, Atti del 34° Convegno Nazionale dell'Associazione Italiana di Acustica (2007), 1–5.
 - 25) Renato Ricci, Francesco Angeletti, Sergio Montelpare, and Alessio Secchiaroli, Micrositing analysis of a wind farm layout in an environmental wind tunnel - Preliminary results, Climamed 2007 Energy, Climate and Indoor Comfort in Mediterranean Countries Proceedings (2007), 111–124.
 - 26) Renato Ricci, Francesco Angeletti, Francesco D'Amico, Sergio Montelpare, and Alessio Secchiaroli, Messa a punto della galleria del vento ambientale dell'Università Politecnica delle Marche per prove di aerodinamica ambientale su edifici, Atti del IX° Convegno Nazionale di Ingegneria del Vento, IN-VENTO 2006 (2006), 529–540.
 - 27) Renato Ricci, Francesco Angeletti, Sergio Montelpare, and Alessio Secchiaroli, Thermographic analysis of acoustic disturbance effects on laminar separation bubble, QIRT (2006), 1–12.
 - 28) Gaetano Borrelli, Francesco D'Amico, Sergio Montelpare, Renato Ricci, and Alessio Secchiaroli,
 - 29) Modellazione e realizzazione dello strato limite atmosferico in galleria del vento ambientale. Prime prove sperimentali e numeriche, Atti del XXIII Congresso Nazionale UIT sulla Trasmissione del Calore (2005), 447–453.
 - 30) Gaetano Borrelli, Gianni Cesini, Francesco D'Amico, Sergio Montelpare, and Renato Ricci, Tunnel del vento a circuito chiuso per studi di termofluidodinamica ambientale. Prime prove di caratterizzazione, Atti del 22° Congresso Nazionale UIT sulla Trasmissione del Calore (2004).
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