Curriculum Vitae of Professor Pietro Zunino with publications of the last 5 years (2019-2023)

Master Degree in Mechanical Engineering, University of Genoa with honours (1976), Stream in Energy and Propulsion.
Von Karman Institute Diploma Course (Master after Master) in Turbomachinery with honours (1978-79).
Designer of Turbomachinery at Hydroart S.p.A. (Ansaldo, Riva, Tosi), Milano (1977-83).
Assistant Professor of Fluid Machines, University of Genova (1976-1977, 1983-87).
Associate Professor of Fluid Machines, University of Genova (1987-2000).
Professor of Turbomachinery , University of Genova since 2000.
Invited professor at the “Peter the Great” Saint Petersburg Polytechnic University.
Invited professor at the Harbin Engineering University.
Director of the Fluid Machinery, Energy Systems and Transportation Department, University of Genova, DIMSET (2005-2011).
Director of the Department of Mechanical, Energy, Management, Transportation Engineering (DIME) of University of Genova (from 2012 to 2018).

Author of more than 150 scientific papers on Aero-thermodynamics of turbomachines.
Session chairman in International Scientific Conferences.
Scientific reviewer for International Conferences and Scientific Journals.
Evaluator for the European Commission VI and VII Framework.
Associate Editor of the Journal of Thermal Science.
Scientific Committee member of ISAIF International Symposia.
Scientific Committee member of SDEWES International Conferences.
Scientific manager of National and European Research Projects related to Aero-thermodynamics of Gas Turbines.
Manager for Turbomachinery industrial research contracts.

From Scopus, October 2023
h-index 20
Documents 141
Citations 1,239 by 839 documents.

List of publications of Professor Pietro Zunino in the last 5 years (from 2019 to 2023)

H. Ma, H Sun, F. Hao, Y. Luan, T. Sun, P. Zunino: Numerical Investigation on transpiration cooling performance of turbine blades with non-uniform porosity. Applied Thermal Engineering. 2023, Vol. 235.

Y. Luan, L. Yan, T. Sun, P. Zunino: Analysis of the flow field and aerodynamic noise of marine gas turbine air intake system: The Journal of the Acoustical Society of America, 2023, Vol. 154 (2), pp.886-901.

D. Barsi, R. Fink, P. Odry, M. Ubaldi, P. Zunino: Flow regulation of Low Head Hydraulic Propeller Turbines by means of Variable Rotational speed: Aerodynamic Motivations. Machines, 2023, Vol.11 (2),

R. Francesconi, M. Luzzi, D. Barsi, F. Satta, F. Stefani, P. Zunino: Preliminary Design of a Mini Gas Turbine via 1D Methodology. Energies, 15(21), 2022.

E. Sokolova, K. Sadeghi, S.H. Ghazaie, D. Barsi, F. Satta, P. Zunino: Feasibility of Hybrid Desalination Plants Coupled with Small Gas Turbine CHP Systems, Energies, 15(10), 2022.

L. Yang, F. Satta, D. Barsi, P. Zunino, Y. Luan: Numerical Investigation of Laidback Fan Shaped Film Cooling Holes with Large Eddy Simulation, in Asme Turbo Expo 2022, number GT2022-83961, 2022, Rotterdam, The Netherlands.

D. Barsi, M. Luzzi, F. Satta, P. Zunino: On the Possible Introduction of Mini Gas Turbine Cycles Onboard Ships for Heat and Power Generation. Energies, 14 (3), 2021.

D. Barsi, M. Ubaldi, P. Zunino, R. Fink: Optimized design of a novel hydraulic propeller turbine for low heads, Designs, 5(1), 2021.

D. Barsi, C. Costa, D. Lengani, G. Venturino, P. Zunino: Experimental and Numerical Analysis of Cavity/Mean-Flow Interaction in Low Pressure Axial Flow Turbines, Journal of Thermal Science, 2021.

Y. Qu, D. Barsi, D. Simoni, P. Zunino, Y. Luan: Investigation of Laminar Separation Bubble on Flat Plate with Adverse Pressure Gradient: Time-Averaged Flow Field Analysis, International Journal of Aerospace Engineering, 2021.

D. Lengani, D. Simoni, V. Yepmo, M. Ubaldi, P. Zunino, F. Bertini: Low Rank Education of Cascade Loss Sensitivity to Unsteady Parameters by Proper Orthogonal decomposition, Journal of turbomachinery, Transaction of ASME, Vol. 143(11), 2021.

E. Canepa, D. Lengani, A. Nilberto, D. Petronio, D. Simoni, M. Ubaldi, P. Zunino: Flow Coefficient and reduced Frequency effects on Wake-Boundary Layer Interaction in Highly Accelerated LPT Cascade, International Journal of Turbomachinery, Propulsion and Power, Vol.6(3), 2021.

D. Barsi, C. Costa, F. Satta, P. Zunino, A. Busi, R. Ghio, C. Raffaeli, A. Sabattini: Design of a mini combined heat and power cycle for naval applications. Journal of Sustainable Development of Energy, Water and Environment Systems, 2020, Vol. 8, p. 281-292.

M. Dellacasagrande, D. Lengani, D. Simoni, M. Ubaldi, P. Zunino: Evaluation of Turbulent Spot Production Rate in Boundary Layers Under Variable Pressure Gradients for Gas

Turbine Applications Journal of Turbomachinery, Transactions of the ASME, 2020.

D. Lengani, D. Simoni, M. Ubaldi, P. Zunino, F. Bertini: Recognition of Structures Leading to Transition in a Low-Pressure Turbine Cascade: Effect of Reduced Frequency, Journal of Turbomachinery, Transactions of the ASME, 2020.

M. Dellacasagrande, D. Lengani, D. Simoni, M. Ubaldi, P. Zunino: Experimental Investigation on the Loss Production Mechanisms in Transitional Boundary Layers. ASME Turbo Expo 2020.

G. Mingaleeva, O. Afanaseva, D.T. Nguen, D.N. Pham, P. Zunino: The Integration of Hybrid Mini Thermal Power plants into the Energy Complex of the Republic of Vietnam, Energies, Vol. 13(21), 2020.

D. Barsi, A. Bono, F. Satta, P. Zunino: Gas turbine prime movers fuelled by LNG as a future alternative for sustainable power in marine propulsion: current emission policy assessment and exhaust quality evaluation. In: E3S Web of Conferences. E3S Web of Conferences, 113, 2019, Savona, Italy.

Y. Luan, L. Yang, S. Bu, T. Sun, H. Sun, P. Zunino: Effect of connecting holes on flow and heat transfer in a two-pass channel with and without rib turbulators, International Journal of Heat and Mass Transfer, 2019.

M. Dellacasagrande, R. Guida, D. Lengani, D. Simoni, M. Ubaldi, P. Zunino: Correlations for the Prediction of Intermittency and Turbulent Spot Production Rate in Separated Flows, Journal of Turbomachinery, Transactions of the ASME, 2019.

Y. Luan, L. Lianfeng, Y. Yin, P. Zunino: reserch on the Effect of Dimples and Protrusions on Flow and Heat transfer in Matrix Cooling Channels in Tuurbine Blades, ASME Turbo Expo 2019, Paper GT2019-90830, 2019.