

Prof. Ing. Giulio Lorenzini

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Biografia in sintesi

- **1972:** 29 giugno, nato a Bologna (Italia)
- **1989:** Maturità classica con valutazione pari a 60/60
- **1994:** Laurea in Ingegneria Nucleare presso l'Alma Mater Studiorum-Università di Bologna con valutazione pari a 100/100 e lode e Tesi di Laurea in Fisica Tecnica (Relatore il Prof. Enzo Zanchini)
- **1995:** Abilitato alla professione di Ingegnere (Esame di Stato) con valutazione pari a 120/120
- **A.A. 1995-'96:** Primo classificato con valutazione pari a 120/120 al concorso per il Dottorato di Ricerca in Ingegneria Nucleare presso l'Alma Mater Studiorum-Università di Bologna
- **1999:** Dottore di Ricerca in Ingegneria Nucleare
- **01.10.1996 – 30.09.2005:** Ricercatore in Fisica Tecnica Industriale (S.S.D. ING-IND/10 già I05A) presso l'Alma Mater Studiorum-Università di Bologna
- **2002:** Vincitore di un'ideoneità quale Professore Associato di Fisica Tecnica Industriale (ING-IND/10) nell'ambito della Procedura di valutazione comparativa conclusasi nel mese di luglio presso la Facoltà di Ingegneria dell'Università degli Studi di Parma
- **01.10.2005 – 31.10.2010:** Professore Associato (Confermato dal 01.10.2008) di Fisica Tecnica Industriale (ING-IND/10) presso l'Alma Mater Studiorum-Università di Bologna
- **2010:** Vincitore di un'ideoneità quale Professore Ordinario di Fisica Tecnica Ambientale (ING-IND/11) nell'ambito della Procedura di valutazione comparativa conclusasi nel mese di giugno presso la Facoltà di Ingegneria dell'Università Telematica "E-Campus"
- **01.11.2010 – oggi:** Professore Ordinario di Fisica Tecnica Ambientale (ING-IND/11) presso il Dipartimento di Ingegneria e Architettura (già Dipartimento di Ingegneria Industriale) dell'Università degli Studi di Parma
- **h-index attuale: 29**, il più alto del settore e settore affine in tutta la Regione e tra i primi del settore e settore affine in tutta Italia (www.scopus.com)
- **2020:** incluso nella pubblicazione annuale della Stanford University "World's top 2% Scientists" (DOI: 10.13140/RG.2.2.18594.45767)

Altre informazioni personali

- **11.12.2011 – 04.06.2016**: cintura nera 1° dan di Karate-Do stile Shotokan con la FIAM (Federazione Italiana Arti Marziali) affiliata alla WKC (World Karate Confederation)
- **05.06.2016 – oggi**: cintura nera 2° dan di Karate-Do stile Shotokan con la FIAM (Federazione Italiana Arti Marziali) affiliata alla WKC (World Karate Confederation)
- **19.02.2017 – 05.05.2018**: terapeuta Reiki di 1° livello
- **06.05.2018 – oggi**: terapeuta Reiki di 2° livello
- **Famiglia**: sposato dal 2001, padre di due figli

Incarichi scientifici, editoriali ed accademici

- Editor-in-Chief della rivista scientifica internazionale **International Journal of Design & Nature and Ecodynamics**, IETA Publisher (Canada), ISSN:1169-7954 (Print); 1958-5799 (Online), dal 20-01-2021
- Editor-in-Chief della rivista scientifica internazionale **Revue des Composites et des Matériaux Avancés**, IETA Publisher (Canada), ISSN:1169-7954 (Print); 1958-5799 (Online), dal 29-07-2019
- Editor-in-Chief della rivista scientifica internazionale **Mathematical Models of Engineering Problems**, IETA Publisher (Canada), ISSN:2369-0739 (Print); 2369-0747 (Online), dal 08-02-2018
- Guest Editor della Special Issue “Cleaner Energy and Greener Environment: Problems, Solutions and Applications” della rivista scientifica internazionale **Alexandria Engineering Journal**, Elsevier Publisher, ISSN: 1110-0168, 2020. **[ISI JOURNAL]**
- Guest Editor della Special Issue “Engineering Thermodynamics, Heat Transfer and Fluid Flow in Natural and Industrial Processes” della rivista scientifica internazionale **Defect and Diffusion Forum**, Trans. Tech. Publications Ltd. (Switzerland, scientific.net), ISSN: 1662-9507, ISBN-13: 978-3-0357-1329-9, 2017-2019
- Guest Editor della Special Issue “Application of Machine Learning, Artificial Intelligence, Deep Learning and Big Data Analysis in Nanofluids and Nanoparticles Design” della rivista scientifica internazionale **Applied Sciences**, ISSN: 2076-3417, 2020
- Guest Editor della Special Issue “Heat Transfer Analysis in Processes of Developing and Applying Renewable Energies and Novel Materials” della rivista scientifica internazionale **ASME Journal of Thermal Science and Engineering Applications**, 2018
- Nomination come "**Member of the Scientific Council**" dell'**International Centre for Heat and Mass Transfer (ICHMT)**, comunicato dal Segretario Generale il 22 luglio 2012
- Eletto "**Member of the Scientific Council**" dell'**International Centre for Heat and Mass Transfer (ICHMT)**, comunicato dal Segretario Generale il 29 settembre 2012

- **Guest Editor** della “*Special Issue on “Developments in Fundamentals and Applications of Renewable Energy”*” della rivista scientifica internazionale *Thermal Science*, 2017
- **Regional Editor for Europe** dell'*International Journal of Heat & Technology* (Publisher: IETA) dal 1.3.2016
- **Associate Editor** dell'ASME *Journal of Heat Transfer* dal 1.7.2009 a fine 2015 (ASME: American Society of Mechanical Engineers, associazione professionale-scientifica americana di riferimento per gli ingegneri meccanici e industriali)
- **Associate Editor** dell'ASME *Journal of Thermal Science and Engineering Applications* da inizio 2015 (ASME: American Society of Mechanical Engineers, associazione professionale-scientifica americana di riferimento per gli ingegneri meccanici e industriali)
- **Guest Editor** dell'ASME *Journal of Heat Transfer* dal 2006 al 30.6.2009 (ASME: American Society of Mechanical Engineers, associazione professionale-scientifica americana di riferimento per gli ingegneri meccanici e industriali)
- **Associate Editor** dell'ASME *Journal of Electronic Packaging* dal 2004 al 2013 (ASME: American Society of Mechanical Engineers, associazione professionale-scientifica americana di riferimento per gli ingegneri meccanici e industriali)
- **Lead Editor** della "*Special Issue on Advances in Optimization Methods in Heat and Mass Transfer*" dell'ASME *Journal of Heat Transfer*, 2015
- **Editor** della rivista scientifica internazionale *Continuum Mechanics and Thermodynamics* (**Springer-Verlag**; ISSN: 0935-1175) dal gennaio 2012 (volume 24, n° 1)
- **Associate Editor** della rivista scientifica internazionale *International Journal of Energy and Environmental Engineering*, (**Springer-Verlag**; ISSN: 2008-9163), dal 11 luglio 2014
- **Guest Editor** della "*Special Issue on Multiscale Discrete Simulation of Complex Systems*" del *Discrete Dynamics in Nature and Society* **IMPACT FACTOR 2013: 0.82**, Hindawi Publishing Corporation, 2015
- **Deputy Editor-in-Chief** del *Journal of Engineering Thermophysics*, rivista scientifica internazionale co-pubblicata da **Springer-Verlag** (ISSN: 1810-2328) dal gennaio 2012 (volume 21, n° 1)
- **Associate Editor-in-Chief** del *Journal of Engineering Thermophysics*, rivista scientifica internazionale co-pubblicata da **Springer-Verlag** (ISSN: 1810-2328 formato cartaceo; ISSN: 1990-5432 formato elettronico) da marzo 2006 a gennaio 2012
- **Co-Editor-in-Chief** del *International Journal of Agriculture & Environment*, rivista scientifica internazionale (www.engineerspress.com) (ISSN: 2307-2652 formato elettronico) dal marzo 2013

- **Associate Editor-in-Chief** del journal *Energy and Power Engineering*, rivista scientifica internazionale pubblicata in U.S.A. (www.scirp.org) (ISSN: 1949-243X formato cartaceo; ISSN: 1947-3818 formato elettronico) dal 1 dicembre 2012
- **Editor** del *Central European Journal of Engineering* dal maggio 2011, rivista scientifica internazionale co-pubblicata da **Springer-Verlag** (ISSN: 1896-1541 formato cartaceo; ISSN: 2081-9927 formato elettronico)
- **Peer Reviewer** dal luglio 2008, quale esperto scientifico internazionale, per il *Georgian National Science Foundation* (istituzione nazionale Georgiana per l'impostazione della ricerca strategica – ora *Shota Rustaveli National Science Foundation*)
- **Membro dell'Editorial Board** della rivista scientifica internazionale *Facta Universitatis Mechanical Engineering* [Scopus Indexed] (ISSN 0354-2025; eISSN 2335-0164) dal 23-4-2021
- **Membro dell'Editorial Board** della rivista scientifica internazionale *Reports in Mechanical Engineering* [Scopus Indexed] (eISSN 2683-5894; DOI <https://doi.org/10.31181/rme250520p>) dal 23-4-2021
- **Membro dell'International Advisory Board** della rivista scientifica internazionale *Thermal Science* (ISSN: 0354-9836, fondata dalla Society of Thermal Engineers of Serbia, pubblicata dall'Institute for Nuclear Sciences, Vincha, Belgrade, Serbia) dal 13.8.2012
- **Membro dell'Editorial Board** del *International Journal of Design & Nature and Ecodynamics* (ex *International Journal of Design & Nature*), rivista scientifica internazionale pubblicata in Inghilterra, sin dalla fondazione (vol. 1, no. 1, 2007)
- **Membro dell'Editorial Board** del *The Open Thermodynamics Journal*, rivista scientifica internazionale online, sin dalla fondazione (vol. 1, 2007)
- **Membro dell'Editorial Board** del *The Open Agricultural Journal*, rivista scientifica internazionale online, sin dalla fondazione (vol. 1, 2007)
- **Membro dell'Editorial Board** del *International Journal of Sustainable Development and Planning*, rivista scientifica internazionale pubblicata in Inghilterra, dal 2009 (vol. 3, no. 1, 2009)
- **Membro dell'Editorial Board** del *World Journal of Mechanics*, rivista scientifica internazionale pubblicata in U.S.A. (www.scirp.org), dal 1.10.2011
- **Membro dell'Editorial Board** di *Natural Science*, rivista scientifica internazionale pubblicata in U.S.A. (www.scirp.org), dal 20.12.2011
- **Membro dell'Editorial Board** di *Irrigation & Drainage Systems Engineering*, rivista scientifica internazionale pubblicata in U.S.A. (www.omicsonline.org), dal 15.12.2011

- **Membro dell'Editorial Board** di *Agricultural Science*, rivista scientifica internazionale pubblicata in U.S.A. (www.scirp.org), dal 13.12.2011
- **Membro dell'Editorial Board** del *Journal of Agricultural Science and Applications*, rivista scientifica internazionale pubblicata in U.S.A. (www.j-asa.org), da aprile 2012
- **Membro dell'Editorial Board** di *Renewable Bioresources*, rivista scientifica internazionale pubblicata in U.K. (www.hoajonline.com/renewablebioresources), da gennaio 2013
- **Membro dell'Editorial Board** del *International Journal of Mechanic Systems Engineering (IJMSE)*, rivista scientifica internazionale pubblicata in U.S.A. (www.jomse.org/index.aspx), da gennaio 2013
- **Membro dell'Editorial Board** del *Science Road Journal (SRJ)*, rivista scientifica internazionale pubblicata in Ucraina (www.newcpres.com/index.php/srj-editorial-board), da giugno 2013
- **Membro dell'Editorial Board** del *International Journal of Heat & Technology*, rivista scientifica internazionale, dal luglio 2010
- **Chairman** del “Field of Interest-Special Interest Group-Power and Machinery-Fruit and Vegetable Production Engineering” (SIG PM 11) dell’EurAgEng (European Society of Agricultural Engineers), associazione europea di riferimento per l’Ingegneria Agraria e dei Biosistemi, dal giugno 2003
- **Referee scientifico** per conto delle seguenti riviste scientifiche internazionali:
 - International Journal of Heat and Mass Transfer
 - International Journal of Thermal Sciences
 - Heat and Mass Transfer
 - ASME (American Society Mechanical Engineers) Journal of Heat Transfer
 - ASME (American Society Mechanical Engineers) Journal of Electronic Packaging
 - ASME (American Society Mechanical Engineers) Journal of Thermal Science and Engineering Applications
 - ASME (American Society Mechanical Engineers) Journal of Solar Engineering
 - Applied Thermal Engineering
 - Chemical Engineering Science
 - Energy
 - Energy Conversion and Management
 - Energy and Buildings
 - Continuum Mechanics and Thermodynamics
 - Scientific Reports
 - Thermal Science
 - Heat Transfer Research
 - Heat Transfer Engineering
 - Fluid Dynamics Research
 - International Journal of Low-Carbon Technologies
 - Numerical Methods for Partial Differential Equations
 - Composite Structures

- International Journal of Green Energy
 - International Journal of Energy and Environmental Engineering
 - Physica A (Elsevier)
 - Chinese Journal of Physics (Elsevier)
 - Ain Shams Engineering Journal
 - Informatics in Medicine Unlocked
 - Journal of Molecular Liquids
 - Journal of Thermal Analysis and Calorimetry
 - Zeitschrift für Angewandte Mathematik und Mechanik
 - Sustainable Energy Technologies and Assessments
 - Applied Mathematical Modelling
 - Reliability Engineering and System Safety
 - Journal of Food Engineering
 - Biosystems Engineering
 - Journal of Thermal Science and Engineering Applications
 - Water Resources Research
 - Journal of Irrigation and Drainage Engineering
 - Transactions of the ASABE (American Society Agricultural Biological Engineers)
 - Journal of Molecular Liquids
 - International Journal of Environmental Engineering
 - Computers and Fluids
 - Irrigation Science
 - Natural Science
 - International Journal of Management Science and Engineering Management
 - International International Journal of Design and Nature & Ecodynamics
 - Mathematical Problems in Engineering
 - The Open Agriculture Journal
 - Revista Mexicana de Fisica
 - Journal of Agricultural Engineering
- **Membro International Scientific Committee** della *7th International Symposium on Advances in Computational Heat Transfer*, Napoli, 28 maggio-2 giugno 2017
 - **Membro Advisory Committee** della Second International Conference on Mechanical Design and Engineering (ICMDE 2016, www.icmde.org), Turin (Italy), 22-24 gennaio 2016
 - **Membro International Scientific Committee** della *6th International Symposium on Advances in Computational Heat Transfer*, Rutgers University, New Jersey (USA), 25 - 29 maggio 2015
 - **Membro International Advisory Committee** della *3rd International Conference on Power Science and Engineering* (ICPSE 2014, www.icpse.org), Barcelona (Spain), 18 - 20 dicembre 2014
 - **Membro Scientific Comitee** della *International Conference on Agricultural Engineering CIGR-AgEng 2012*, Valencia (Spagna), 8 – 12 luglio 2012

- **Chairman** della *First International Conference on Monitoring, Simulation, Prevention and Remediation of Dense and Debris Flows “Debris Flow 2006”*, Rodi (Grecia), 7 – 9 giugno 2006
- **Chairman** della *First International Conference on Sustainable Irrigation Management, Technologies and Policies “Sustainable Irrigation 2006”*, Bologna, 5 – 7 settembre 2006
- **Chairman** della sessione “*Direct, indirect and in-situ measurements*” nell’ambito della *Twelfth International Conference on Computational Methods and Experimental Measurements “CMEM 2005”*, Malta, 20 – 22 giugno 2005
- **Chairman** della sessione “*Irrigation Management*” nell’ambito della *First International Conference on Sustainable Irrigation Management, Technologies and Policies “Sustainable Irrigation 2006”*, Bologna, 5 – 7 settembre 2006
- **Membro ISAC (International Scientific Advisory Comitee)** della *Fifth International Conference on Environmental Problems in Coastal Regions “Coastal Environment”*, Alicante (Spagna) 26 – 28 aprile 2004
- **Membro ISAC (International Scientific Advisory Comitee)** della *Fifth International Conference on Advances in Fluid Mechanics “AFM 2004”*, Lisbona (Portogallo) 22 – 24 Marzo 2004
- **Membro ISAC (International Scientific Advisory Comitee)** delle *First and Second International Conferences on Evolution, Monitoring, Simulation, Management and Remediation of the Geological Environment and Landscape “Geo-Environment”*: Segovia (Spagna) 5 – 7 luglio 2004, Rodi (Grecia) 6 – 8 giugno 2006
- **Membro ISAC (International Scientific Advisory Comitee)** della *Third International Conference Comparing Design in Nature with Science and Engineering “Design & Nature 2006”*, The New Forest (Inghilterra) 22 – 24 Maggio 2006
- **Membro ISAC (International Scientific Advisory Comitee)** della *Thirteenth International Conference on Computational Methods and Experimental Measurements “CMEM 2007”*, Praga (Repubblica Ceca), 2 – 4 luglio 2007
- **Membro ISAC (International Scientific Advisory Comitee)** della *Second International Conference on Sustainable Irrigation Management, Technologies and Policies “Sustainable Irrigation 2008”*, Alicante (Spagna) 11 – 13 giugno 2008
- **Membro ISAC (International Scientific Advisory Comitee)** della *Second International Conference on Monitoring, Simulation, Prevention and Remediation of Dense and Debris Flows “Debris Flow 2008”*, The New Forest (Inghilterra), 18 – 20 giugno 2008
- **Membro ISAC (International Scientific Advisory Comitee)** della *Third International Conference on Debris Flow including all aspects of Debris Flow Monitoring, Modelling, Hazard Assessment, Mitigation Measures, Extreme Events, Erosion, Slope Instability and Sediment Transport “Debris Flow 2010”*, Milano (Italia), 24 – 26 maggio 2010

- **Membro ISAC (International Scientific Advisory Comitee)** della *Second International Conference on Forest Fires “Forest Fires 2010”*, Kos (Grecia), 23 – 25 giugno 2010
- **Responsabile della Redazione** della *Rivista di Ingegneria Agraria* (classificata come categoria B1 – Osservatorio della Ricerca) dal numero 1 – 2002 (ma “de facto” già dal numero 3 – 2000) fino al numero 1 – 2004, organo ufficiale dell’AIIA (Associazione Italiana di Ingegneria Agraria)
- **Membro del Collegio Docenti** nel Dottorato di Ricerca in Ingegneria Agraria dell’Alma Mater Studiorum-Università di Bologna dall’A.A. 2004-‘05 fino al 08.02.2011
- **Membro del Collegio Docenti** nel Dottorato di Ricerca in Ingegneria Industriale dell’Università degli Studi di Parma dal 08.02.2011
- **Membro della Commissione** per l'accertamento della conoscenza della lingua italiana da parte di studenti stranieri (Università degli Studi di Parma, Dipartimento di Ingegneria Industriale)

Riconoscimenti ricevuti

- **1990: Premio “Carlo Semenza”** per merito negli studi universitari, conferito dall’Alma Mater Studiorum-Università di Bologna con annessi medaglia e diploma
- **1995: Premio “Prof. Emanuele Foà”** per la tesi di laurea svolta in Fisica Tecnica, conferito dall’Alma Mater Studiorum-Università di Bologna con annessi diploma e borsa di studio
- **1995:** attestazione quale “*meritevole di particolare menzione*” nell’ambito del “Premio 1995 per la migliore Tesi di Laurea nel settore della Termofluidodinamica dell’UIT (Unione Italiana di Termofluidodinamica)” della Tesi di Laurea presentata dall’Ing. Giulio Lorenzini
- **1997: lettera di menzione** inviata al Direttore del DIENCA dell’Alma Mater Studiorum-Università di Bologna Prof. Sandro Salvigni da parte del Prof. Michael W. Collins (già Full Professor alla City University di Londra). Il Prof. Collins (traduzione dall’inglese) “*si complimenta con il Dipartimento DIENCA poiché novera fra i suoi ricercatori uno del talento dell’Ing. Giulio Lorenzini*”, facendo in ciò riferimento ai sorprendenti risultati, in relazione al breve periodo da lui avuto e alla complessità della materia trattata, conseguiti dall’Ing. Lorenzini stesso al termine di un periodo di ricerca di tre mesi presso la City University di Londra
- **1997: lettera di menzione** del Direttore del Dipartimento di Ingegneria Meccanica e Aeronautica della City University di Londra, Prof. David Thorley (già Preside della Scuola di Ingegneria della medesima Università), che, tra le altre cose attestate sull’Ing. Giulio Lorenzini, dichiara (tradotto dall’inglese) “*siamo stati molto colpiti dalla sua abilità ed abnegazione...Speriamo di potere essere in grado di mantenere con lui nel futuro delle collaborazioni*”
- **1997: lettera di menzione** della Dottoressa Francesca Iudicello, già Docente presso la City University di Londra, la quale, in seguito alla collaborazione instaurata con l’Ing. Lorenzini presso la City University di Londra, dichiara (tradotto dall’Inglese) “*la sua abnegazione nel lavoro e la sua capacità di comprendere la fisica del problema da modellizzare non sono comuni...ha dimostrato una abilità straordinaria nello scrivere pubblicazioni scientifiche di alto livello e nel presentare il suo lavoro in lingua inglese.... Io ed il mio Dipartimento siamo stati molto impressionati dai risultati e dal potenziale dell’Ing. Lorenzini e gradiremmo continuare a lavorare insieme nel futuro...*”
- **1997: lettera di merito** (con raccomandazione per l’iscrizione ad un corso di PhD in Termofluidodinamica presso la City University di Londra) indirizzata al Prof. Michael W. Collins da parte del Prof. Carlo M. Orlandelli (all’epoca Tutore dell’Ing. Lorenzini nel Dottorato di Ricerca) tra cui (traduzione dall’inglese) si dice “*ho avuto modo di apprezzare la laboriosità del Dr. Lorenzini come mio collaboratore nella ricerca e nell’insegnamento... il Dr. Lorenzini ha mostrato entusiasmo verso tutti i compiti che doveva svolgere e ha dimostrato positive capacità di comunicazione con tutti i membri dello staff*”
- **1997: lettera di merito** indirizzata al Prof. Michael W. Collins da parte del Prof. Marco Spiga (attualmente Professore di Prima Fascia ING-IND/10 presso l’Università degli Studi di Parma) tra cui (traduzione dall’inglese) si dice “*ritengo che Giulio Lorenzini sia diligente, coscienzioso e in grado di fornire un valido contributo allo sviluppo dell’attività di ricerca del nostro Dipartimento...*”

- **1999: lettera di menzione** del Prof. Carlo M. Orlandelli, allora titolare del corso “Gestione dell’Energia” presso la Facoltà di Ingegneria di Reggio Emilia dell’Università degli Studi di Modena e Reggio Emilia, al Preside Prof. Olmes Bisi in cui, proponendo che sia affidato all’Ing. Giulio Lorenzini il Corso di Esercitazioni inerente il suo insegnamento, dice tra l’altro “...il sottoscritto...propone la nomina dell’Ing. Giulio Lorenzini in qualità di esperto per il corso di esercitazioni da effettuare nell’ambito di Gestione dell’Energia...l’Ing. Lorenzini possiede tutti i requisiti richiesti per svolgere il compito proposto...”
- **1999: lettera di menzione** del Preside della Facoltà di Ingegneria dell’Alma Mater Studiorum-Università di Bologna attestante, a nome dell’unanime consiglio di Facoltà, che Giulio Lorenzini “... ha sempre adempiuto ai suoi gravosi compiti didattici con impegno, dimostrando competenza e attitudini all’insegnamento, con piena soddisfazione della Facoltà.[...]”
- **2001:** risulta l’unico Fisico Tecnico dell’Alma Mater Studiorum-Università di Bologna ad essere finanziato dal CNR (sia per la sezione “Giovani” sia per quella “Coordinati”) nell’ambito di “Agenzia 2000”, con il progetto di ricerca “Analisi teorica, numerica e sperimentale della ottimizzazione fluidodinamica per lo smaltimento di elevati flussi termici tramite Effetto Vapotron in ambito industriale”
- **2004:** nella terza edizione del testo “Convection Heat Transfer” di Adrian Bejan (Distinguished Professor alla Duke University, U.S.A.) Giulio Lorenzini viene citato tra coloro cui spettano i ringraziamenti per avere contribuito con “aiuto ed idee” alla realizzazione del lavoro
- **2006:** incluso per merito, dopo selezione preliminare dei candidati, nella 23^a edizione di “Who’s Who in the World”, edito da Marquis (U.S.A.) pubblicazione che riporta le biografie di persone che si siano particolarmente distinte nel proprio ambito professionale
- **2007:** come comunicato dal Prof. De Wrachien (past-President dell’EURAGENG, European Association of Agricultural Engineers, e Membro del Comitato Esecutivo della CIGR, International Commission of Agricultural Engineering) la rivista con impact factor “Irrigation and Drainage” (organo dell’ICID, *International Commission on Irrigation and Drainage*) dà atto che l’articolo di Giulio Lorenzini, “Air temperature effect on spray evaporation in sprinkler irrigation” (*Irrigation and Drainage*, 51 (4), 301 – 309, 2002) è il **10° articolo più citato dal 2001 ad oggi**
- **2007:** eletto “**miglior Associate Editor dell’anno**” dall’ASME *Journal of Electronic Packaging* in riferimento al periodo 2006 – 2007, come comunicato dall’Editor-in-Chief Prof. Bahgat Sammakia
- **2012: premio** conferito dalla “**Electronic and Photonic Packaging Division**” della ASME (American Society of Mechanical Engineers) come riconoscimento dell’attività editoriale svolta con eccezionali risultati
- **2013:** riconoscimento conferito dal *Georgian National Science Foundation* (istituzione nazionale Georgiana per l’impostazione della ricerca strategica – ora *Shota Rustaveli National Science Foundation*) come “**International Peer Reviewer having provided high quality and impartial evaluation of state research grants**”

- **2013:** nominato **membro della giuria scientifica** (quale unico Docente Universitario del S.S.D. ING-IND/11 Fisica Tecnica Ambientale) del "*PREMIO SOSTENIBILITA' 2013*", istituito dall'Agenzia per l'Energia e lo Sviluppo Sostenibile di Modena per l'edilizia, la bioarchitettura e l'urbanistica sostenibili in relazione all'integrazione con l'ambiente, il controllo dei consumi energetici, l'impiego di materiali e tecniche non inquinanti nè nocive per la salute dell'uomo
- **2013: reviewer scientifico**, su richiesta del publisher McGraw-Hill, per la seconda edizione italiana del testo "Moran, Shapiro, Elementi di fisica tecnica per l'ingegneria" **[DOC. 29]**
- **2019:** in the first edition of the book "*Freedom and Evolution-Hierarchy in Nature Society and Science*" by Professor Adrian Bejan, published by Springer, **Giulio Lorenzini** is acknowledged as one of "**my closest collaborators who pioneered the physics of life, design and evolution everywhere**"

Associazioni scientifico-professionali

E' Stato/è membro delle seguenti associazioni:

- Member **ASME** (American Society of Mechanical Engineers)
- Member **ASCE** (American Society of Civil Engineers)
- Member **ASHRAE** (American Society of Heating Refrigerating and Air-conditioning Engineers)
- Member **EurAgEng** (European Society of Agricultural Engineers)
- Socio **UIT** (Unione Italiana di Termofluidodinamica)
- Socio **AIIA** (Associazione Italiana di Ingegneria Agraria)
- Socio **AIGE** (Associazione Italiana Gestione dell'Energia)
- Iscritto all'**Ordine degli Ingegneri** (settori: civile-ambientale, industriale, dell'informazione) della provincia di Bologna

Curriculum didattico

Ha svolto le lezioni di esercitazione per i seguenti corsi:

- **Fisica Tecnica** (A.A. 1996-'97; Corso di Laurea in Ingegneria Gestionale, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Reggio Emilia)
- **Gestione dell'Energia** (A.A. 1996-'97, A.A. 1997-'98; Corso di Laurea in Ingegneria Gestionale, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Reggio Emilia)
- **Gestione dell'Energia** (A.A. 1997-'98; Corso di Laurea in Ingegneria Gestionale, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Bologna)
- **Gestione dell'Energia** (A.A. 1998-'99; Corso di Laurea in Ingegneria Gestionale, Università degli Studi di Modena e Reggio Emilia, Facoltà di Ingegneria di Reggio Emilia)
- **Fisica Tecnica** (A.A. 1998-'99; Corso di Laurea in Ingegneria Elettronica, Corso di Laurea in Ingegneria Informatica e Corso di Laurea in Ingegneria delle Telecomunicazioni, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Bologna)

E' stato (in nero) / è attualmente (in blu) Membro o Presidente nelle commissioni di esame dei seguenti insegnamenti:

- **Fisica Tecnica** (A.A. 1996-'97, A.A. 1997-'98, A.A. 1998-'99; Corso di Laurea in Ingegneria Meccanica, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Bologna)
- **Fisica Tecnica** (A.A. 1996-'97; Corso di Laurea in Ingegneria Civile e Corso di Laurea in Ingegneria per l'Ambiente e il Territorio, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Bologna)
- **Fisica Tecnica** (A.A. 1996-'97; Corso di Laurea in Ingegneria Gestionale, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Reggio Emilia)
- **Fisica Tecnica** (A.A. 1998-'99; Corso di Laurea in Ingegneria Elettronica, Corso di Laurea in Ingegneria Informatica e Corso di Laurea in Ingegneria delle Telecomunicazioni, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Bologna)
- **Fisica Tecnica** (A.A. 1997-'98, A.A. 1998-'99; Corso di Laurea in Ingegneria Gestionale, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Bologna)
- **Sicurezza ed Analisi di Rischio** (A.A. 1996-'97; Corso di Laurea in Ingegneria Gestionale, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Bologna)
- **Gestione dell'Energia** (A.A. 1996-'97, A.A. 1997-'98; Corso di Laurea in Ingegneria Gestionale, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Reggio Emilia)

- **Gestione dell'Energia** (A.A. 1998-'99; Corso di Laurea in Ingegneria Gestionale, Università di Modena e Reggio Emilia, Facoltà di Ingegneria di Reggio Emilia)
- **Gestione dell'Energia** (A.A. 1997-'98, A.A. 1998-'99; Corso di Laurea in Ingegneria Gestionale, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Bologna)
- **Fisica Tecnica** (A.A. 1999-2000; Corso di Diploma Universitario in Ingegneria Meccanica, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Forlì)
- **Misure Meccaniche, Termiche e Collaudi** (A.A. 1999-2000; Corso di Diploma Universitario in Tecnico Ortopedico, Alma Mater Studiorum-Università di Bologna, Facoltà di Medicina e Chirurgia)
- **Fisica** (A.A. 2003-'04; Tutti i Corsi di Laurea, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Cesena)
- **Meccanica e Idraulica Agraria** (A.A. 2003-'04, A.A. 2004-'05, A.A. 2005-'06; Corso di Laurea Specialistica in Progettazione e gestione degli ecosistemi agroterritoriali, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Bologna)
- **Idraulica Agraria e Riassetto Idraulico del Territorio** (A.A. 2001-'02, A.A. 2002-'03, A.A. 2003-'04, A.A. 2004-'05, A.A. 2005-'06, A.A. 2006-'07, A.A. 2007-'08; Corso di Laurea in Scienze del Territorio e dell'Ambiente Agroforestale, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Bologna)
- **Ingegneria Alimentare** (A.A. 2005-'06, A.A. 2006-'07, A.A. 2007-'08; Corso di Laurea Specialistica in Scienze e Tecnologie Alimentari, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Cesena)
- **Elementi di Fisica** (A.A. 2005-'06, A.A. 2006-'07, A.A. 2007-'08; Tutti i Corsi di Laurea, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Bologna)
- **Fisica** (A.A. 2008-'09; Tutti i Corsi di Laurea, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Bologna)
- **Fisica Applicata** (A.A. 2003-'04, A.A. 2004-'05, A.A. 2005-'06, A.A. 2006-'07, A.A. 2007-'08; Corso di Laurea in Scienze dei Consumi Alimentari e della Ristorazione, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Cesena)
- **Fisica Tecnica** (A.A. 2003-'04, A.A. 2004-'05, A.A. 2005-'06, A.A. 2006-'07, A.A. 2007-'08; Corso di Laurea in Scienze e Tecnologie Alimentari, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Cesena)
- **Fisica Tecnica** (A.A. 2008-'09, A.A. 2009-'10, A.A. 2010-'11; Corso di Laurea in Tecnologie Alimentari e Corso di Laurea in Scienze dei Consumi Alimentari e della Ristorazione, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Cesena)

- **Operazioni Unitarie con Applicazioni** (A.A. 2009-'10, A.A. 2010-'11; Corso di Laurea in Viticoltura ed Enologia, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Cesena)
- **Sistemi di Gestione dell'Energia** (A.A. 2004-'05, A.A. 2005-'06, A.A. 2006-'07, A.A. 2007-'08, A.A. 2008-'09, A.A. 2009-'10, A.A. 2010-'11; Corso di Laurea Specialistica/Magistrale in Progettazione e gestione degli ecosistemi agroterritoriali, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Bologna)
- **Impianti dell'Industria Alimentare** (A.A. 2010-'11; Corso di Laurea in Scienze e Tecnologie Alimentari, Università degli Studi di Parma)
- **Energetica** (A.A. 2011-'12, A.A. 2012-'13, A.A. 2013-'14; A.A. 2014-'15; A.A. 2015-'16; A.A. 2016-'17; Corso di Laurea Magistrale in Scienze e Tecnologie Alimentari, Università degli Studi di Parma)
- **Fisica Tecnica** (A.A. 2012-'13, A.A. 2013-'14; A.A. 2014-'15; A.A. 2015-'16; A.A. 2016-'17; A.A. 2017-'18; A.A. 2018-'19; A.A. 2019-'20; A.A. 2020-'21; Corso di Laurea in Ingegneria Gestionale, Università degli Studi di Parma)
- **Fisica Tecnica** (A.A. 2011-'12, A.A. 2012-'13, A.A. 2013-'14; A.A. 2014-'15; A.A. 2015-'16; A.A. 2016-'17; A.A. 2017-'18; A.A. 2018-'19; A.A. 2019-'20; A.A. 2020-'21; Corso di Laurea in Scienze e Tecnologie Alimentari, Università degli Studi di Parma)

E' stato (in nero) / è attualmente (in blu) titolare dei seguenti insegnamenti:

- **Misure Meccaniche, Termiche e Collaudi** (A.A. 1999-2000; Corso di Diploma Universitario in Tecnico Ortopedico, Alma Mater Studiorum-Università di Bologna, Facoltà di Medicina e Chirurgia)
- **Fisica Tecnica** (A.A. 1999-2000; Corso di Diploma Universitario in Ingegneria Meccanica, Alma Mater Studiorum-Università di Bologna, Facoltà di Ingegneria - sede di Forlì)
- **Fisica** (A.A. 2003-'04; Tutti i Corsi di Laurea, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Cesena)
- **Idraulica Agraria e Forestale** (A.A. 2003-'04, A.A. 2004-'05, A.A. 2005-'06; Corso di Laurea Specialistica in Progettazione e gestione degli ecosistemi agroterritoriali, forestali e del paesaggio, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Bologna)
- **Impianti Trattamento Reflui** (A.A. 2005-'06; Corso di Laurea Specialistica in Scienze e Tecnologie Alimentari, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Cesena)
- **Principi di Idraulica Agroterritoriale** (A.A. 2001-'02, A.A. 2002-'03, A.A. 2003-'04, A.A. 2004-'05, A.A. 2005-'06, A.A. 2006-'07, A.A. 2007-'08; Corso di Laurea in Scienze del Territorio e dell'Ambiente Agroforestale, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Bologna)

- **Elementi di Fisica** (A.A. 2005-'06, A.A. 2006-'07, A.A. 2007-'08; Tutti i Corsi di Laurea, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Bologna)
- **Fisica** (A.A. 2008-'09; Tutti i Corsi di Laurea, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Bologna)
- **Fisica Tecnica** (A.A. 2003-'04, A.A. 2004-'05, A.A. 2005-'06, A.A. 2006-'07, A.A. 2007-'08; Corso di Laurea in Scienze e Tecnologie Alimentari e Corso di Laurea in Scienze dei Consumi Alimentari e della Ristorazione, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Cesena)
- **Fisica Tecnica** (A.A. 2003-'04, A.A. 2004-'05, A.A. 2005-'06, A.A. 2006-'07, A.A. 2007-'08; Corso di Laurea in Scienze e Tecnologie Alimentari e Corso di Laurea in Scienze dei Consumi Alimentari e della Ristorazione, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Cesena)
- **Fisica Tecnica** (A.A. 2008-'09, A.A. 2009-'10, A.A. 2010-'11; Corso di Laurea in Tecnologie Alimentari e Corso di Laurea in Scienze dei Consumi Alimentari e della Ristorazione, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Cesena)
- **Fisica Tecnica** (A.A. 2009-'10, A.A. 2010-'11; Corso di Laurea in Viticoltura ed Enologia, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Cesena)
- **Gestione dell'Energia** (A.A. 2004-'05, A.A. 2005-'06, A.A. 2006-'07, A.A. 2007-'08, A.A. 2008-'09, A.A. 2009-'10, A.A. 2010-'11; Corso di Laurea Specialistica/Magistrale in Progettazione e Gestione degli Ecosistemi Agroterritoriali, Forestali e del Paesaggio, Alma Mater Studiorum-Università di Bologna, Facoltà di Agraria - sede di Bologna)
- **Impianti dell'Industria Alimentare** (A.A. 2010-'11; Corso di Laurea in Scienze e Tecnologie Alimentari, Università degli Studi di Parma)
- **Energetica** (A.A. 2011-'12, A.A. 2012-'13, A.A. 2013-'14; A.A. 2014-'15; A.A. 2015-'16; A.A. 2016-'17; Corso di Laurea Magistrale in Scienze e Tecnologie Alimentari, Università degli Studi di Parma)
- **Fisica Tecnica** (A.A. 2012-'13, A.A. 2013-'14; A.A. 2014-'15; A.A. 2015-'16; A.A. 2016-'17; A.A. 2017-'18; A.A. 2018-'19; A.A. 2019-'20; A.A. 2020-'21; Corso di Laurea in Ingegneria Gestionale, Università degli Studi di Parma)
- **Fisica Tecnica** (A.A. 2011-'12, A.A. 2012-'13, A.A. 2013-'14; A.A. 2014-'15; A.A. 2015-'16; A.A. 2016-'17; A.A. 2017-'18; A.A. 2018-'19; A.A. 2019-'20; A.A. 2020-'21; Corso di Laurea in Scienze e Tecnologie Alimentari, Università degli Studi di Parma)

Altri titoli didattici

- **1995:** nell'ambito del Corso di "Termotecnica del Reattore" (Corso di Laurea in Ingegneria Nucleare, Facoltà di Ingegneria, Università degli Studi di Bologna) ha tenuto una lezione a carattere seminariale sul tema dello scambio termico da superfici alettate
- **1995:** nell'ambito del Corso di "Sicurezza e Analisi di Rischio" (Corso di Laurea in Ingegneria Gestionale, Facoltà di Ingegneria, Università degli Studi di Bologna) ha tenuto una lezione seminariale sul tema "Genesi ed Estinzione degli Incendi"
- **1995:** nell'ambito del Corso di "Termotecnica del Reattore" (Corso di Laurea in Ingegneria Nucleare, Facoltà di Ingegneria, Università degli Studi di Bologna) ha tenuto una lezione a carattere seminariale sul tema dei metodi avanzati per lo smaltimento termico
- **1996:** nell'ambito del Corso di "Termotecnica del Reattore" (Corso di Laurea in Ingegneria Nucleare, Facoltà di Ingegneria, Università degli Studi di Bologna) ha tenuto alcune lezioni a carattere seminariale sul tema dello Scambio Termico
- **1997:** nell'ambito del Corso di "Termotecnica del Reattore" (Corso di Laurea in Ingegneria Nucleare, Facoltà di Ingegneria, Università degli Studi di Bologna) ha tenuto alcune lezioni a carattere seminariale sul tema dello Scambio Termico
- **1997:** ha partecipato alla "Scuola estiva di Termofluidodinamica dell'UIT (Unione Italiana di Termofluidodinamica)" organizzata presso la Certosa di Pontignano (SI) dal 31 agosto al 6 settembre
- **1998:** nell'ambito del Corso di "Termotecnica del Reattore" (Corso di Laurea in Ingegneria Nucleare, Facoltà di Ingegneria, Università degli Studi di Bologna) ha tenuto alcune lezioni a carattere seminariale sul tema dei problemi termici causati dagli incendi in ambiente confinato
- **1999:** nell'ambito del Corso di "Sicurezza e Analisi di Rischio" (Corso di Laurea in Ingegneria Gestionale, Facoltà di Ingegneria, Università degli Studi di Bologna) ha tenuto una lezione seminariale sul tema "L'Impiantistica Antincendio alla luce delle normative"
- **2001:** ha tenuto il seminario specialistico "Idrostatica dei terreni soffici e rigonfiabili" agli studenti del Dottorato di Ricerca in Ingegneria Agraria presso la Facoltà di Agraria dell'Alma Mater Studiorum-Università di Bologna
- **2001:** ha tenuto il seminario specialistico "Evapotraspirazione" agli studenti del Dottorato di Ricerca in Ingegneria Agraria presso la Facoltà di Agraria dell'Alma Mater Studiorum-Università di Bologna
- **2002:** nelle date 28.10 e 30.10 ha tenuto il seminario specialistico "Teoria ed applicazioni degli scambiatori di calore" agli studenti di Termotecnica del Reattore del Corso di Laurea in Ingegneria Nucleare presso la Facoltà di Ingegneria dell'Alma Mater Studiorum-Università di Bologna
- **2002:** nelle date 20.11 e 25.11 ha tenuto il seminario specialistico "Miscele d'aria e vapor d'acqua: definizioni, diagrammi psicrometrici e trasformazioni dell'aria umida" agli studenti

di “Termotecnica del Reattore” del Corso di Laurea in Ingegneria Nucleare presso la Facoltà di Ingegneria dell’Alma Mater Studiorum-Università di Bologna

- **A.A. 2002-’03:** ha svolto un modulo di 15 ore per l’insegnamento di “Termotecnica del Reattore” del Corso di Laurea in Ingegneria Nucleare presso la Facoltà di Ingegneria dell’Alma Mater Studiorum-Università di Bologna
- **2005:** in data 17.06 ha svolto una lezione seminariale sul tema della climatizzazione civile agli studenti del Master in “Facility Management e Global Service” dell’Alma Mater Studiorum-Università di Bologna
- **2007:** in data 16.11 ha svolto una lezione seminariale dal titolo “Pannelli e sistemi fotovoltaici - Progettazione, resa, accumulo. Valutazioni economiche” agli studenti del Corso di Alta Formazione Universitaria in “Energetica degli Edifici” organizzato dalla Fondazione Alma Mater di Bologna

Lezioni su invito

- **12.12.1997: seminario specialistico su invito** dal titolo “Experimental Heat Transfer in Two Phase Flow” nell’ambito del Corso “Heat Transfer” del *MSc (Master of Science) in Energy Management* presso la City University di Londra
- **30.08 – 03.09.1999: lezione su invito** in merito all’Effetto Vapotron e Hypervapotron nell’ambito della “*Seconda Scuola Estiva di Termofluidodinamica sul tema della Termofluidodinamica Bifase*”, organizzata dall’U.I.T. (Unione Italiana di Termofluidodinamica) e rivolta a dottorandi di ricerca, dottori di ricerca e giovani ricercatori
- **07.06.2006: lezione su invito** dal titolo “Gullies and debris flows analysis: a case study in Sardinia and a rheological modelling approach” alla *First International Conference on Monitoring, Simulation, Prevention and Remediation of Dense and Debris Flows* tenutasi a Rodi (Grecia)
- **05.09.2006: lezione su invito** dal titolo “Theoretical and experimental analysis on the thermal fluid dynamics of water droplets in irrigation” alla *First International Conference on Sustainable Irrigation, Management, Technologies and Policies* tenutasi a Bologna
- **17 - 19.11.2014: lezione su invito** dal titolo “Modelling droplet evaporation in air. Challenges and perspectives” alla XXXI Siberian Thermophysics Seminar, Novosibirsk (Russia)
- **18 - 20.12.2014: Keynote Speech** alla Third International Conference on Power Science and Engineering (ICPSE 2014, www.icpse.org), Barcellona (Spagna)
- **22-24.01-2016: Keynote Speech** at the Second International Conference on Mechanical Design and Engineering (ICMDE 2016, www.icmde.org), Turin (Italy)

Pubblicazioni scientifiche e didattiche

(in blu quelle scritte in Inglese)

Monografie scientifiche internazionali

1. **Giulio Lorenzini**, Natascia Mazza, “Debris flows: phenomenology and rheological modellisation”, *Witpress*, Southampton (UK) / Boston (USA), ISBN 1-85312-802-3, 2004.
2. **Giulio Lorenzini**, Cesare Biserni, Giuseppe Flacco, “Solar Thermal and Biomass Energy”, *Witpress*, Southampton (UK) / Boston (USA), ISBN 978-1-84564-147-4, 2010.
3. **Giulio Lorenzini**, Simone Moretti, Alessandra Conti, “Fin shape thermal optimization using Bejan's Constructal theory”, *Morgan & Claypool Publishers*, San Francisco / Ft. Collins / Princeton / Bonita Springs / Seattle (USA), ISBN 9781608456079 (paperback); ISBN 9781608456086 (ebook), 2011.
4. Alessandra De Angelis, Onorio Saro, **Giulio Lorenzini**, Stefano D'Elia, Marco Medici, “Simplified Models for Assessing Heat and Mass Transfer in Evaporative Towers”, *Morgan & Claypool Publishers*, San Francisco / Ft. Collins / Princeton / Bonita Springs / Seattle (USA), ISBN 9781627051910, doi:10.2200/S00501ED1V01Y201304ENG022, 2013.

Monografie didattiche

5. **Giulio Lorenzini**, Giampietro Fabbri, “Genesi e prevenzione degli incendi”- *Pitagora Editrice*, Bologna, ISBN 88-371-0826-5, 1996.
6. Paolo Tartarini, **Giulio Lorenzini**, Giampietro Fabbri, “Esercizi di Termotecnica”, *Edizioni ETS*, Pisa, ISBN 88-7741-954-7, 1996.
7. **Giulio Lorenzini**, “Lezioni di Fisica Tecnica 1”- *Pitagora Editrice*, Bologna, ISBN 88-371-1792-2, 2009.
8. **Giulio Lorenzini**, “Elementi di Fisica Tecnica”- *Pitagora Editrice*, Bologna, ISBN 88-371-1922-4, 2016.

Articoli scientifici

9. Paolo Tartarini, Filippo Gavelli, **Giulio Lorenzini**, “Analisi numerica della propagazione di onde di pressione in gallerie ferroviarie”, *Tecnica Italiana*, no. 3, 183 – 193, 1994.
10. **Giulio Lorenzini**, “Asportazione di elevati flussi termici mediante ebollizione: applicazioni al raffreddamento dei componenti elettronici” (Tesi di laurea in Fisica Tecnica – pubblicazione depositata in Procura della Repubblica e Prefettura ai sensi del D.L. n° 660, 31-08-1945), 1994.
11. Giampietro Fabbri, **Giulio Lorenzini**, “Asportazione di elevati flussi termici da superfici alettate mediante ebollizione”, *Tecnica Italiana*, no. 4, 239 – 247, 1994.

12. Giampietro Fabbri, **Giulio Lorenzini**, “High thermal fluxes removal from finned surfaces under boiling conditions”, *International Journal of Heat and Technology*, 13(1), 29 – 40, 1995.
13. Giampietro Fabbri, **Giulio Lorenzini**, “A Hypervapotron effect application for high power electronic devices cooling”, *International Journal of Heat and Technology*, 13 (1), 75 – 84, 1995.
14. Giampietro Fabbri, **Giulio Lorenzini**, “Analisi numerica bidimensionale di dissipatori a profilo sinusoidale”, *Atti XIII Congresso Nazionale dell’Unione Italiana di Termofluidodinamica (U.I.T.)*, Bologna, 22 – 23 giugno, 491 – 499, 1995.
15. Giampietro Fabbri, **Giulio Lorenzini**, “Raffreddamento di superfici alettate mediante effetto Hypervapotron”, *Atti XIII Congresso Nazionale dell’Unione Italiana di Termofluidodinamica (U.I.T.)*, Bologna, 22 – 23 giugno, 319 – 331, 1995.
16. Giampietro Fabbri, **Giulio Lorenzini**, “Determinazione sperimentale del coefficiente di convezione da dissipatori a profilo ondulato”, *Atti 50° Congresso Nazionale dell’Associazione Termotecnica Italiana (A.T.I.)*, Saint-Vincent, 11 – 15 settembre, Vol. 1, 77 - 86, 1995.
17. Giampietro Fabbri, **Giulio Lorenzini**, Marco Spiga, “Analisi di un sistema di cogenerazione in un’industria ceramica”, *Atti 50° Congresso Nazionale dell’Associazione Termotecnica Italiana (A.T.I.)*, Saint-Vincent, 11 – 15 settembre, Vol. 1, 733 - 743, 1995.
18. Giampietro Fabbri, **Giulio Lorenzini**, “Experimental calculation of convective heat transfer coefficient for wavy profile fins”, *Proc. 2nd European Thermal Sciences and 14th UIT National Heat Transfer Conference*, Rome (Italy), 29 – 31 May, Vol. 1, 585 – 591, 1996.
19. Giampietro Fabbri, **Giulio Lorenzini**, David Alexandro Quiros “Experimental analysis of the convection coefficient in conduits with wavy walls”, *International Journal of Heat and Technology*, 14 (1), 45 – 57, 1996.
20. Giampietro Fabbri, **Giulio Lorenzini**, Carlo Maria Orlandelli, “Experimental analysis of heat removal from finned surfaces under boiling conditions”, *Proc. Fifth International Conference on Multiphase Flow in Industrial Plants*, Amalfi (Italy), 26 – 27 September, 183 – 190, 1996.
21. **Giulio Lorenzini**, Maria Roberta Randi, Paolo Tartarini “Analisi sperimentale del fenomeno dell’evaporazione a gocce al variare del grado di purezza del liquido e della conducibilità termica del solido”, *Atti 51° Congresso Nazionale dell’Associazione Termotecnica Italiana (A.T.I.)*, Udine, 16 – 20 settembre, Vol. 1, 261 – 272, 1996.
22. Giampietro Fabbri, **Giulio Lorenzini**, Marco Spiga “Analysis of the drying process in a ceramic factory”, *Proc. Fifth International Conference on Multiphase Flow in Industrial Plants*, Amalfi (Italy), 26 – 27 September, 139 – 146, 1996.
23. Roberto Lazzarini, **Giulio Lorenzini**, Vittorio Verni “Qualità, normativa e impresa”, *Tecnica Italiana*, no. 2, 43 – 57, 1996.

24. **Giulio Lorenzini**, “Sul problema di contenimento nei reattori veloci refrigerati al sodio”, *Tecnica Italiana*, no. 3, 93 – 97, 1996.
25. Giampietro Fabbri, **Giulio Lorenzini**, “Cogenerazione applicata all' industria ceramica”, *L'Installatore Italiano*, no. 6, 777 – 783, 1997.
26. **Giulio Lorenzini**, Giampietro Fabbri, Maria Roberta Randi, ”Cogenerazione di elettricità e calore”, *Tecnica Italiana*, no. 1, 25 – 37, 1997.
27. Roberto Lazzarini, **Giulio Lorenzini**, Vittorio Verni, “Qualità - Un fattore strategico per le imprese”, *Fluid*, no. 3, 74 – 80, 1997.
28. Enrico Lorenzini, **Giulio Lorenzini**, Paolo Tartarini, “A 'D.V.F.C' analysis in a condition of boiling on a flat surface”, *Atti 52° Congresso Nazionale dell'Associazione Termotecnica Italiana (A.T.I.)*, Cernobbio (Como), 22 – 26 settembre, Vol. 1, 563 – 572, 1997.
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Attività di ricerca

L'attività di ricerca svolta dal Prof. Giulio Lorenzini, che ha toccato svariati temi spesso in sinergia reciproca, si è sempre rivolta a temi di applicazione fisico-tecnica, affrontati utilizzando i metodi matematici più evoluti. Le pubblicazioni del Prof. Giulio Lorenzini riflettono quindi in pieno quanto appena affermato. I filoni principali di ricerca affrontati sono i seguenti:

- Studio sperimentale, analitico e numerico dell'Effetto Vapotron (con le varianti Super- e Hypervapotron, particolari tipi di ebollizione sottoraffreddata in grado di incrementare notevolmente lo scambio termico) e delle prestazioni termiche degli scambiatori di calore a profilo sinusoidale e vario
- Un secondo filone che parte dal precedente è l'applicazione della "Constructal theory" (tecnica analitica per l'ottimizzazione prestazionale di sistemi a geometria modificabile) a problemi di ottimizzazione di scambio termico da superfici affacciate ed a problemi di ottimizzazione di profili alettati
- L'evaporazione a gocce, anch'essa studiata analiticamente, sperimentalmente e numericamente, applicata alla refrigerazione di superfici ad elevata temperatura e agli spray di interesse irriguo
- La dinamica dell'Effetto Camino e della stratificazione termica nell'aria (tema affrontato sperimentalmente, numericamente ed analiticamente)
- La fluidodinamica biomedica, intesa come flusso sanguigno all'interno di arterie interessate da affezioni strumentali e/o patologiche, studiata allo scopo di dare un essenziale contributo fluidodinamico al medico ed al bio-ingegnere, senza il quale si giungerebbe troppo spesso a letture errate dei risultati strumentali diagnostici conseguiti. In tale filone di ricerca sono in atto varie richieste di collaborazione da parte di enti stranieri, soprattutto inglesi
- La modellizzazione matematica e lo studio sperimentale di problemi di infiltrazione multidirezionale di fluidi in mezzi porosi insaturi, anche in relazione alla reologia dei flussi iperconcentrati

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