

INFORMAZIONI PERSONALI

Antonio Ficarella



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💬 skype

Sesso M | Data di nascita | Nazionalità Italiana

ESPERIENZA
PROFESSIONALE

Settembre 1998 – oggi

Professore ordinario di Sistemi per l'Energia e l'Ambiente presso l'Università del Salento (Lecce, Italia).

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▪ Principali attività e responsabilità

Professore di 1a fascia di Sistemi per l'Energia e l'Ambiente presso l'Università del Salento. Direttore del Dipartimento di Ingegneria dell'Innovazione. Presidente della Fondazione Istituto Tecnico Superiore (ITS) Mobilità sostenibile e Aerospazio dal 2013. Già Preside della Facoltà di Ingegneria Industriale. E' stato Componente del Consiglio di Amministrazione del Distretto Tecnologico Aerospaziale (DTA).

Componente dell'Advisory Council for Aeronautics Research in Europe (ACARE) dal 2012, e del Comitato Tecnico del CTNA - Cluster Tecnologico Nazionale Aerospaziale dal 2012.

Componente del Comitato per lo Sviluppo dell'Industria Aeronautica dal 2014 al 2019.

Socio dello spin-off ADVANTECH srl dal 2011.

Consulente industriale nelle tematiche riguardanti i sistemi energetici, l'impatto ambientale, gli impianti industriali e la sicurezza industriale.

Registrato nella lista esperti del Ministero italiano dell'Istruzione, dell'Università e della Ricerca, per la valutazione dei progetti riguardanti la ricerca scientifica e tecnologica e lo sviluppo industriale. Ha svolto attività di valutazione di progetti di ricerca e sviluppo industriale dal 2005. Consulente scientifico del Ministero per lo Sviluppo Economico, e delle Regioni Liguria, Marche, Toscana, Veneto e Provincia Bolzano per la valutazione dei progetti riguardanti la ricerca scientifica e tecnologica e lo sviluppo industriale.

Technical Officer di progetti di ricerca e sviluppo per conto di INVITALIA - Invitalia, Agenzia nazionale per l'attrazione degli investimenti e lo sviluppo d'impresa, dal 2011.

Esperto valutatore di diversi progetti per conto del Ministero dello Sviluppo Economico, in particolare nell'ambito dei programmi PON. Ha svolto attività di valutazione di progetti di ricerca e sviluppo industriale dal 2005.

Ha svolto attività di valutazione progetti per conto di FinPiemonte, della Agencie National de la Recherche (Francia), della Provincia di Bolzano, del GSE, della Regione Marche, della Regione Emilia Romagna, di Veneto Innovazione.

Esperto per la valutazione dei progetti di ricerca nel settore dell'energia per conto della CCSE - Cassa Conguaglio Settore Elettrico (dal 2007).

Responsabile scientifico del Laboratorio MIUR INGENIA & Partners srl, Organismo di Ricerca ai sensi della CEE 2006/C 323/01 del 30/12/2006 e in Italia, mediante il proprio Laboratorio Istituto di Ricerca INGENIA Lab, laboratorio di Ricerca Altamente Qualificato accreditato dal Ministero della Istruzione, Università e Ricerca Scientifica ai sensi del D.M. 8 agosto 2000, n. 593. (dal 10/12/2014 al 2015).

Professore di Macchine, Sistemi Energetici, Propulsione Aeronautica, Progettazione e Gestione dei sistemi energetici, Energetica Industriale, Fluidodinamica, Sostenibilità della dei sistemi propulsivi ed energetici.

Ha partecipato a diverse ricerche di base e applicate e a progetti di sviluppo, in collaborazione con industrie, assumendo spesso il ruolo di responsabile scientifico. I progetti coprono i settori della fluido-dinamica applicata, del design industriale, in particolare il settore dell'analisi dell'impatto ambientale, dei rifiuti industriali, dell'energia rinnovabile, dell'agro-alimentare, della combustione, della propulsione. Si riporta un elenco di tali progetti, rinviando all'Appendice per una descrizione più dettagliata.

- PRIN 2005: Controllo Cycle-Resolved delle Emissioni nei Motori a Combustione Interna Mediante un Innovativo Sensore Ottico. Durata 24 mesi, funzione Coordinatore nazionale del Progetto.

- Tecnologie per la propulsione sostenibile (GREEN ENGINE). Proposta finanziata nell'ambito dell'Accordo di programma Quadro "Ricerca Scientifica" Il Atto integrativo Avviso Pubblico "Reti di Laboratori Pubblici e di Ricerca" - Regione Puglia. Le attività del presente laboratorio a rete si inquadrano nel contesto internazionale della ricerca e sviluppo industriale dei processi di combustione e conversione dell'energia, con particolare riferimento alla competizione mondiale nel settore della propulsione. Durata 30 mesi, funzione Coordinatore progetto.

- Responsabile scientifico dell'unità locale nel progetto europeo INTERREG - Energie rinnovabili e gestione delle foreste (Progetto Europeo INTERREG 2005).

- Centro di Competenza Innovazione Trasporti – C.C.I.T.

- MALET – Sviluppo di tecnologie per la propulsione ad alta quota e lunga autonomia di velivoli non abitati. Progetto nell'ambito del PON. Il progetto mira alla acquisizione di tecnologie, e alla loro validazione, per sviluppare sistemi propulsivi di velivoli senza pilota a bordo (UAV) che debbano svolgere missioni ad alta quota e per lungo tempo. Il focus tecnologico del progetto è un motore alternativo Diesel, due tempi common rail, con un sistema di sovralimentazione multistadio. Durata 36 mesi, funzione Coordinatore nazionale progetto formazione.

Responsabile scientifico del progetto MEA (Gestione ibrida dell'energia per applicazioni aeronautiche) dal 01/09/2013.

il progetto Hybrid Energy Management si propone di impostare, valutare, analizzare e sviluppare architetture propulsive ibride per applicazioni UAV e Aviazione Generale che permettano di ottimizzare le prestazioni in termini di gestione dell'energia a bordo velivolo.

Il progetto, che ha dunque l'obiettivo di indagare architetture in grado di migliorare la gestione energetica a bordo velivolo e di ridurre gli impatti ambientali, affronta innanzitutto aspetti sistemistici definendo i KPI su cui valutare l'efficacia delle soluzioni architetture proposte, per poi concentrarsi sullo sviluppo delle tecnologie abilitanti necessarie alla realizzazione di tali architetture innovative.

Per rendere applicabile ed efficace questo approccio, il progetto coinvolge partner con elevata specializzazione e competenza nel settore dei sistemi e delle piattaforme aeronautiche, delle macchine elettriche, dell'elettronica di potenza, del controllo di sistemi complessi, dell'accumulo energetico, dei motori endotermici e con la capacità di sviluppare e gestire le tecnologie necessarie alla realizzazione di architetture propulsive in grado di gestire in modo innovativo ed efficace l'energia a bordo di un velivolo.

Responsabile scientifico per l'Università del Salento, dal 2016, del progetto TECHNOLOGY DEVELOPMENT COMMUNITY, per attività di ricerca, sviluppo e innovazione in collaborazione con GE Avio e diversi Atenei italiani. Responsabile scientifico, dal 2016, delle attività di ricerca ed innovazione volte allo sviluppo e alla produzione di nuove soluzioni nel campo di motori aeronautici, in collaborazione con GE Avio e il Distretto Tecnologico Aerospaziale.

Other scientific coordination of research and development projects:

- (Project Scientific Coordinator) SMEA: Diagnostic and Prognostic Methods and Sensors Development for the Health Monitoring in Aeronautic and Transport Applications. The aim of the project is to create, within the Cluster Distretto Tecnologico Aerospaziale Pugliese, a common platform of skills and technologies for the development of monitoring, diagnostic and prognostic models inherent to aeronautical propulsive systems and components structural integrity in order to integrate sensors and microsystems for several applications in the Aeronautics, Aerospace and, in addition, naval fields. Technological expertises and skills will be thus developed allowing to the Distretto Tecnologico Aerospaziale to strengthen as excellence center, both in national and worldwide panorama, for the development of technologies for advanced systems, microsystems, and sensors. Partners: DTA SCARL - Distretto Tecnologico Aerospaziale Pugliese, ENGINSOFT SpA, Avio Aero, Leonardo-Finmeccanica Spa - Divisione Elicotteri, CNR – Consiglio Nazionale delle Ricerche.

- (Local Scientific Coordinator) FLET: The project starts with the problem of managing data collected

by the service of objects that are also very different in order to optimize their availability and costs towards the end user through the development of algorithms that enable intelligent information management in order to simulate scenarios, reduce data availability time, and optimize maintenance.

This requirement has been dealt with in this project in three areas (aero, railway and space), as described below. The partnership was set up in order to address all the issues that will emerge during the course of the project and consists of Large Enterprises, Universities and SMEs. The project intends to develop a system so that it can highlight alarms and ordered lists of controls suggested to the operator by the identified anomaly or the level of novelty (and therefore due attention) for the specific behavior found. Partners: DTA scarl, Politecnico di Bari, Politecnico di Torino, GE Avio srl, EKA, EnginSoft, MERMEC, BlackShape, Planetek Italia. (2018-2022)

- (Local Scientific Coordinator) FURTHER: The FURTHER project is aimed at developing technologies to enable innovative propulsion systems with increased electrical contribution for vertical take-off and landing (VTOL) vehicles and general aviation platforms. Research will be on those systems and subsystems related to the propulsion system and the energy generation and conversion system, control including control logic and avionics software, hardware and accessories. All of these require deep integration with aircraft systems to improve performance and reduce environmental impact. The project will help positioning the nation at the forefront of technological innovation and the

development of complex propulsion systems that will characterize the aviation sector over the next few years. The ability to develop these types of systems is a competency that normally resides in heavily industrialized states in engineering and FURTHER intends to contribute to enhancing the role of the Puglia and Piedmont regions through a network of industrial skills. Ultimately, the goals for the aircrafts that will be studied will face the new challenges for the transport in the society, reducing the environmental impact and moving transport solutions to more sustainable concepts. (2018-2022)

- (Local Scientific Coordinator) CLOSE: The project also aims at studying a new "small" spacecraft (below 500 kg of total mass) capable of hosting a RAM-EP propulsion system and capable of operating at VLEO. Specifically, the range to be studied in the project is between 160 and 250 km, an area which is unexplored for spacecraft, except for the GOCE scientific mission (which, however, only for a short period of time at the end of its operating life flew between 225 and 250km). Just as for GOCE (and to a greater extent), the spacecraft will have to be thought out ex-novo, having to study aerodynamic issues to deal with drag. Finally, the project will study some of the applications and services that can be realized with satellites and constellations by operating at an altitude so far never used for Earth Observation. We will investigate possible payloads that can be hosted by the spacecraft, both optical and radar, and applications that can be generated with their use at such a low altitude. Partners: Distretto Tecnologico Aerospaziale (DTA) scarl, Politecnico di Bari, Sitael SpA, Enginsoft SpA, ENEA, CNR, Planetek srl, Blackshape SpA, Università degli Studi di Bari "Aldo Moro", GAP srl, IMT srl – Bari (BA).

Scientific coordination of Europea projects:

- (Local Scientific Coordinator) ADE - Autonomous decision making. The high level objectives and the ambitions of OG10, namely Autonomous Decision Making (ADE), are multiples when analysed over time. In the short/mid-term needs means advancing in designing, developing and testing key technologies suitable to better explore (increase of scientific and overall data collection) autonomously planetary surfaces exploration (in long traverse) while guaranteeing fast reaction (on board deliberative capabilities), mission reliability and safety, and optimal exploitation of robotic means resources within reasonable costs. Partners: GMV AEROSPACE AND DEFENCE SA (GMV), JOANNEUM RESEARCH FORSCHUNGSGESELLSCHAFT MBH (JR), THALES ALENIA SPACE ITALIA SPA (TASI), DEUTSCHES FORSCHUNGSZENTRUM FÜR KUNSTLICHE INTELLIGENZ GMBH (DFKI), TRASYS INTERNATIONAL GEIE (TRASYS), MAGELLIUM SAS (MAGELLIUM SAS), AIRBUS DEFENCE AND SPACE LTD (AIRBUS DS LTD), THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD (UOXF), KING'S COLLEGE LONDON (KCL), UNIVERSITE GRENOBLE ALPES (UGA), GMV INNOVATING SOLUTIONS LTD (GMV UK), UNIVERSIDAD DE MALAGA (UMA).

- (Local Scientific Coordinator) ATLAS. The overall objective of ATLAS is the development of an open digital service platform for agricultural applications and to build up a sustainable ecosystem for innovative data-driven agriculture using the platform. The platform will allow the flexible combination of agricultural machinery, sensor systems and data analysis tools to overcome the problem of lacking interoperability and to enable farmers to increase the productivity in a sustainable way by making use of the most advanced digital technology and data on their own. The platform will define a service architecture providing hardware- and software-interoperability layers which enable the acquisition

and sharing of data from a multitude of sensors and the analysis of this data using a multitude of dedicated analysis approaches. Coordinator: FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V. (Fraunhofer), Germany, and other 29

partners.

- (Local project Manager) Interdisciplinary Training on EU Security, Resilience and Sustainability (EUSecure). The core of our project is the development of a Simulation Supported HEI-level Massive Open Online Course entitled "Interdisciplinary training on EU security, resilience and sustainability" (EUSecure SimMOOC) - that also appears as an accredited elective in our universities' curricula. Beyond the innovative transdisciplinary approach to EU Security studies, EUSecure aims at developing an innovative teaching methodology by complementing in-class learning with interactive blended learning activities and especially a blended simulation exercise. Therefore a widely applicable and user-friendly Handbook for the Conduct of an Interdisciplinary Blended Simulation Exercise will also be developed. Participating organizations: University of Public Service (Budapest), University Fernando Pessoa (Porto), University Piraeus Research Center (Piraeus), Sapientia Hungarian University of Transylvania (Cluj-Napoca). (2020-2021)

Ha partecipato a diverse ricerche di base e applicate e a progetti di sviluppo, in collaborazione con industrie, assumendo spesso il ruolo di responsabile scientifico. I progetti coprono i settori della fluido-dinamica applicata, del design industriale, in particolare il settore dell'analisi dell' impatto ambientale, dei rifiuti industriali, dell'energia rinnovabile, dell'agro-alimentare, della combustione, della propulsione.

Le principali attività di ricerca hanno riguardato i temi dell'energia, delle macchine a fluido, dell'impatto ambientale, e delle applicazioni energetiche per gli impianti industriali. Le principali attività di ricerca sono state svolte nel campo della fluidodinamica applicata e industriale, della combustione, delle turbo-macchine, dell'impatto ambientale, del risparmio energetico, della prevenzione degli inquinanti, del riciclaggio dei rifiuti, e della sicurezza industriale. Si rimanda all'Allegato per una descrizione dettagliata.

È autore di numerosi lavori, pubblicati su riviste internazionali o presentati a congressi e simposi internazionali. Le attività scientifiche hanno riguardato la fluidodinamica instazionaria e bifase all'interno di macchine e impianti, la termofluidodinamica applicata a processi industriali, i motori Diesel e relativi sistemi di iniezione, il controllo e monitoraggio dei motori Diesel, lo sviluppo di sensori di monitoraggio applicati ai motori a combustione interna, le applicazioni nel campo dell'energetica industriale e il relativo impatto ambientale, il recupero di energia da biomasse, rifiuti, e processi industriali. Nel campo della propulsione aerospaziale, le attività di ricerca sono state incentrate sul controllo attivo di flussi (per profili esterni o all'interno delle turbomacchine) e sui combustibili criogenici, con particolare riguardo allo studio della cavitazione e dello spray e il conseguente comportamento della combustione. Si rimanda all'Allegato per un elenco delle pubblicazioni.

Attività o settore Università, Ricerca e Sviluppo Industriale

ISTRUZIONE E FORMAZIONE

- | | | |
|-----------------|--|---------------|
| 'Settembre 1992 | <p>Dottorato di Ricerca in Ingegneria delle Macchine presso l'Università di Bologna.</p> <p>Università di Bologna</p> <ul style="list-style-type: none"> ▪ Nel 1992 ha ricevuto il titolo di Dottore di Ricerca in Ingegneria delle Macchine, con una tesi dal titolo "Sviluppo di modelli conservativi e accurati per il calcolo dei fenomeni pulsanti negli apparati di iniezione dei m.c.i.", presso l'Università di Bologna. | livello QEQ 8 |
| 'Dicembre 1986 | <p>Laurea in Ingegneria Meccanica</p> <p>Sostituire con il nome e l'indirizzo dell'organizzazione erogatrice dell'istruzione e formazione (se rilevante, indicare il paese)</p> <ul style="list-style-type: none"> ▪ Laurea in Ingegneria Meccanica con la votazione di 110/110 e lode conseguita presso l'Università di Bari. La tesi ha ricevuto il premio "Guglielmo Reiss Romoli" del Gruppo STET, e "Vito Signorile" dell'Università di Bari.. Ha conseguito la laurea in Ingegneria Meccanica, con una tesi su "Apparati di iniezione per motori Diesel: simulazione numerica e verifica sperimentale", presso l'Università di Bari. | livello QEQ 7 |

COMPETENZE PERSONALI

Lingua madre Italiano

Altre lingue	COMPRESIONE		PARLATO		PRODUZIONE SCRITTA
	Ascolto	Lettura	Interazione	Produzione orale	
Inglese	C1	C1	C1	C1	C1

Livelli: A1/A2: Livello base - B1/B2: Livello intermedio - C1/C2: Livello avanzato
 Quadro Comune Europeo di Riferimento delle Lingue

Si autorizza al trattamento dei dati personali per le finalità e con le modalità di cui al regolamento europeo (UE) n.2016/679 del 27 aprile 2016 e del decreto legislativo 30 giugno 2003, n. 196.
 Bari, 08/05/2022.



PUBBLICAZIONI

- 1) "Sviluppo di modelli conservativi e accurati per il calcolo dei fenomeni pulsanti negli apparati di iniezione dei m.c.i.", TESI DI DOTTORATO per il conferimento del Dottorato di Ricerca, Università di Bologna, ottobre 1991.
- 2) "Unsteady Measurements behind a Rotating Wheel with Cylindrical Bars", Ficarella A., C. H. Sieverding, Von Karman Institute Report, Bruxelles (Belgio), novembre 1986.
- 3) "Fluiddynamische Erscheinungen in Einspritzanlagen", Ficarella A., D. Laforgia, MTZ Motortechnische Zeitschrift, vol. 52/1, pp. 28-34, gennaio 1991.
- 3B) "Fluid Dynamic Phenomena in Fuel-Injection Systems", Ficarella A., D. Laforgia, Proceedings della II International Conference, Titograd (Yugoslavia), 19-21 maggio 1988.
- 4) "Contribution to the Simulation of Injection Systems for Reciprocating Internal Combustion Engines", Ficarella A., D. Laforgia, SAE Paper No. 885016, 1988. 22nd Congress FISITA 1988, Dearborn-Washington (USA), 25-30 settembre 1988.
- 5) "Poppet Valve Flow Characteristics in Internal Combustion Engines", Ficarella A., D. Laforgia, American Society of Mechanical Engineers, Internal Combustion Engine Division (Publication) ICE, Volume 6, Pages 33-43, ASME ICE, Basic Process in Internal Combustion Engines, vol. 6, pp. 33-43, 1988. Issn: 1066-5048, 1988.
- 5B) "Poppet Valve Flow Characteristics in Internal Combustion Engines", Ficarella A., D. Laforgia, XII Annual Energy Sources Conference, Houston (USA), 22-25 gennaio 1989.
- 6) "Cavitation Problems of Diesel Engine Injection Systems", Ficarella A., N. Intini e D. Laforgia, ATA, vol. 45, n. 3, pag. 115-122, marzo 1992.
- 6B) "Cavitation Problems of Diesel Engine Injection Systems", Ficarella A., N. Intini e D. Laforgia, International Conference on Mechanics of Two-Phase Flows, Taipei (Taiwan), 12-15 giugno 1989.
- 7) "Particle Analysis Using Phase Doppler Systems", VKI Report, Bruxelles (Belgio), ottobre 1989.
- 8) "Investigation and Computer-Simulation of Diesel Injection System with Rotative Pump", Ficarella A., D. Laforgia e G. Cipolla, ASME Journal of Engineering for Gas Turbine and Power, vol. 112 (3), pag. 317-323, DOI: 10.1115/1.2906497, Jul. 1990.
- 8B) "Investigation and Computer Simulation of Diesel Injection System with Rotative Pump", Ficarella A., D. Laforgia e G. Cipolla, ASME Conference on Engine Design, Operation and Control Using Computer Systems, Dearborn (USA), (ASME ICE vol. 9, pp. 87-96), Issn: 1066-5048, 16-18 ottobre 1989.
- 9) "Spray Analysis Using the Phase Doppler System", Ficarella A., J. M. Buchlin, Proceedings del Workshop and Exposition on Fluidmechanics, Combustion and Emissions in Reciprocating Engines, Napoli, 1-5 aprile 1990.
- 10) "Development of an ENO Scheme for Computing Cavitating-liquid Flows", Ficarella A., M. Napolitano, 4th International Symposium on Computational Fluid Dynamic, 1992.
- 11) "Feasibility of Biomass-Fuelled Steam Turbine Cogeneration for Olive Oil Pressing Plants", Ficarella A., D. Laforgia e U. Ruggiero, International Journal of Ambient Energy, vol. 15 (1), pp. 27-36. ISSN: 01430750, gennaio 1994.
- 11B) "Feasibility of Biomass-Fuelled Steam Turbine Cogeneration for Olive Oil Pressing Plants", Ficarella A., D. Laforgia e U. Ruggiero, Cairo International Symposium on renewable Energy Sources, Cairo (Egypt), 30 dicembre - 2 gennaio, 1992-1993.
- 12) "Injection Characteristics Simulation and Analysis in Diesel Engines", Ficarella A., D. Laforgia, International Journal of Meccanica, vol. 28, pp. 239-248. ISSN: 00256455 DOI: 10.1007/BF00989127, 1993.
- 13) "Spray Characteristics of Five-Hole V.C.O. Nozzles of a Diesel Electro-Injector", Ficarella A., R. Campanella, V. Damiani e D. Laforgia, SAE Paper No. 940192, SAE 1994 Transactions - Journal of Engines, vol. 103/3, pp. 120-133, 1994.
- 14) "Diesel Electro-Injector: A Numerical Simulation Code", Ficarella A., G. Bruni, P. DiGesù, D. Laforgia e M. Ricco, SAE Paper No. 940193, 1994. SAE 1994 Transactions - Journal of Engines, vol. 103/3, pp. 100-119, 1994.
- 15) "Hospital and Special Waste Incineration: Laboratory and Pilot Plant Experimentations", Ficarella A., F. Amodio, G. Blasi, D. Laforgia, G. Morabito, D. Ricci, Journées Internationales su les Flamme, Biarritz (Francia), 16-18 marzo 1994.
- 16) "3-D Thermal-Fluid Dynamic Study of Hazardous Hospital Waste Incinerator", Ficarella A., G. Blasi, D. Laforgia e N. Stasolla, Journées Internationales su les Flamme, Biarritz (Francia), 16-18 marzo, 1994.
- 17) "Theoretical and Experimental Study of Post-Combustion Chamber", Ficarella A., F. Amodio, L. Lacquaniti, G. Blasi, D. Laforgia, Journées Internationales su les Flamme, Biarritz (Francia), 16-18 marzo, 1994.
- 18) "Theoretical Study of Post Combustion Chamber for Hospital and Hazardous Waste", Ficarella A., D. Laforgia, CROCUS (Combustion related Organization Common and Unified Symposium), Salsomaggiore Terme, 20-23 settembre, 1994.
- 19) "Residence Time Behaviour and Decomposition of Dioxines in Biomedical and Hazardous Waste Incineration Plant", Ficarella A., D. Laforgia, 49° Congresso Nazionale ATI, Perugia, 26-30 settembre 1994.
- 20) "Analisi della gassificazione delle biomasse per la produzione di elettricità nell'industria agro-alimentare", Ficarella A., D. Laforgia, 49° Congresso Nazionale ATI, Perugia, 26-30 settembre 1994. Impiantistica Italiana, vol. IX, n. 6-7, pp. 37-51, giugno 1996.
- 21) "Studio termofluidodinamico tridimensionale di un forno termodistruttore", Ficarella A., D. Laforgia, N. Stasolla, G. Blasi, Rifiuti Solidi, vol. IX, n. 3, pp. 177-182, maggio-giugno 1995.
- 22) "Energy Conservation in Alcohol Distillery with the Application of Pinch Technology", A. Ficarella, D. Laforgia, Proceedings of ECOS '96, Stockholm, 25-27 giugno 1996. Energy Conversion and Management, n. 40 (14), pp. 1495-1514. DOI: 10.1016/S0196-8904(99)00051-5, Sept. 1999.
- 23) "Operating Experiences, On-Site Performances and Thermo-economic Analysis of a 5 MW Combined Cycle Plant in Agrofood Industry", Ficarella A., D. Laforgia, Proceedings of ECOS '96, Stockholm, 25-27 giugno 1996.
- 24) "Experimental and Numerical Investigation on Cavitating Flows in Diesel Injection Systems", Ficarella A., D. Laforgia. Meccanica, vol. 33 (4), pp. 407-425. DOI: 10.1023/A:1004329902598, Aug. 1998.
- 24B) "Risultati sperimentali e simulazione numerica di flussi bifase durante rapide depressurizzazioni", Ficarella A., D. Laforgia, 51° Congresso Nazionale ATI, Udine, 16-20 settembre, 1996.
- 25) "Campagna di prove per un impianto pilota per la termodistruzione di rifiuti ospedalieri e tossico-nocivi", Ficarella A., D. Laforgia, 49° Congresso Nazionale ATI, Perugia, 26-30 settembre 1994.
- 26) "Dimensionamento di uno filtro ad umido per polveri a servizio di un impianto di essiccazione e combustione di biomasse", Acqua e Aria, n. 5, pp. 87-92, maggio 1999.
- 26B) "Dimensionamento ed esperienze operative di uno scrubber ad umido e un filtro per polveri a servizio di un impianto di trattamento acque di vegetazione", Ficarella A., D. Laforgia, 51° Congresso Nazionale ATI, Udine, 16-20 settembre 1996.
- 27) "Experimental Investigation of the Sprays of an Axi-Symmetric Nozzle of a Common-Rail High Pressure Electro-Injector", Ficarella A., D. Laforgia, G. Starace e V. Damiani, SAE Paper 970054, SAE International Congress and Exposition, Detroit (USA), 24-27 febbraio 1997.
- 28) "Isothermal and Reactive Modeling of a Dry Low NOx Combustor: Computational Study", Ficarella A., D. Laforgia e P. Lonero, Proceedings of Flowers 97, Firenze (Italia), 30 luglio - 1 agosto 1997.
- 29) "A theoretical code to simulate the behavior of an electro-injector for diesel engines and parametric analysis", Ficarella A., V. Amoia, D. Laforgia, S. De Matthaes, C. Genco, SAE Paper 970055, SAE International Congress and Exposition, Detroit (USA), 24-27 febbraio 1997.
- 30) "Evaluation of instability phenomena in a common rail injection system for high speed diesel engines", A. Ficarella, D. Laforgia, V. Landriscina. 1999 SAE International Congress and Exposition, Detroit (USA), 01-04 marzo 1999. SAE Paper 1999-01-0192; SAE 1999 Transactions - Journal of Engines, pp. 322-336,

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