

Curriculum Vitae

Personal information

First name / Surname

Enrico FABRIZIO

Address (work)

Politecnico di Torino
Department of Energy (DENERG)
Corso Duca degli Abruzzi, 24
10129 TORINO
ITALY

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enrico.fabrizio@polito.it

Nationality

Italian

Date of birth

21st May 1978

Education

Date

2 June 2008

Title of qualification awarded

PhD in Génie Civil

Name and type of organisation

*Institut National des Sciences Appliquées de Lyon (diplôme INSALYO 6804459)
MEGA Doctoral School*

Date

2 June 2008

Title of qualification awarded

PhD in Energy Technologies

Name and type of organisation

*Politecnico di Torino
SCUDO Doctoral School*

Date

2003

Title of qualification awarded

Master degree in Architecture

Name and type of organisation

*Politecnico di Torino
110/110 cum laude*

Work experience

Date

30/10/2015

Occupation or position held

Associate Professor (L. 240/10)

Main activities and responsibilities

Research and Teaching equally

Name and address of employer

Politecnico di Torino – Department of Energy (DENERG)

Type of business or sector

Research in the fields of Building Energy Engineering, Building Services Engineering, Indoor Environmental Control for Animals and Plants

Date

1/5/2008 – 29/10/2015

Occupation or position held

Researcher /Assistant Professor

Main activities and responsibilities

Research and Teaching equally

Name and address of employer

University of Torino – Department of Agricultural, Forest and Food Sciences (DISAFA)

Type of business or sector

Research in the fields of Building Energy Engineering, Indoor Environmental Control for Animals and Plants, Environmental impacts of Renewable Energy Technologies

Scientific, technical and professional society memberships and offices	
Awards	<p>He has been awarded the 2014 REHVA Young Scientist Award by the European Federation of Air Conditioning Associations "in recognition of his outstanding scientific achievements and for his contributions to improve energy efficiency and the indoor environment of buildings"</p> <p>Best poster award at the AIA Mid-Term Conference 2015 (Naples, 22-23 June 2015) "Modelling and calibration of a multi-energy system in a chocolate industry" by Biglia, Fabrizio, Ferrara, Gay, Ricauda Aimonino.</p>
Memberships	<p>He is a member of AICARR - Italian Association of Air Conditioning, Heating & Refrigeration member since 2006.</p> <p>He took part to the REHVA task force "Reference buildings for cost optimal analysis".</p> <p>Funding member of IBPSA-Italia, the Italian Chapter of the International Building Performance Simulation Association. Elected in 2011 and 2015 as one of the eight members of the Board.</p> <p>2011-2015 - Treasurer of the IBPSA-Italia Association</p> <p>2015-ongoing - Secretary of the IBPSA-Italia Association</p>
Offices	<p>He takes part to the IEA Annex 59 "High temperature cooling and low temperature heating in buildings" (2012-2015).</p> <p>He takes part to the IEA Annex 31 "Energy storage with energy efficient buildings and districts: optimization and automation" (2014-2017).</p> <p>Member of the Research Commission of the Department of Agricultural, Forest and Food Sciences of the University of Torino (2013-2015).</p> <p>Secretary of the degree course council of "Alpine Sciences and Culture" of the University of Torino (2009-2013).</p> <p>He was within the Organizing Committee of the 2015 IBPC (International Building Physics Conference) in Torino, 14-17 June 2015.</p> <p>Participation to the Technical Committee set up in 2010 by Regione Autonoma Valle d'Aosta for the tender for interventions to create the new university campus in the Aosta (April-May2010)</p> <p>Participation to the working group of a "Preliminary feasibility study of a ground mounted PV plant on the Basse di Stura" of the Town Council of Torino, Direction for the Environment (July-December 2012)</p> <p>Participation to the Energy & Atmosphere Scientific Advisory Board of GBC - Green Building Council Italia (since June 2015)</p>
Invited speeches	<p>He has been invited to present the following speeches</p> <ul style="list-style-type: none"> - <i>Sistemi energetici integrati per l'edilizia residenziale</i>, Convegno AICARR "Verso gli edifici a "energia quasi-zero": le tecnologie disponibili", Bologna 6 October 2011, pp. 69-89 (ISBN 978-88-95620-10-7); invited paper and invited speech. - <i>Il software EnergyPlus</i>, Seminario AiCARR "Introduzione alla simulazione termoenergetica dinamica", Fiera Milano Quartiere Rho, 27 Marzo 2012. - Overview on HVAC and DHW energy systems for residential ZEB, Convegno AiCARR-REHVA "Zero Energy Buildings", Fiera Milano Quartiere Rho, 28 March 2012. - <i>Sistemi multiergia per l'edilizia ospedaliera</i>, Seminario "Interventi per il risparmio energetico negli ospedali", Università di Cagliari, 23 novembre 2012. - The role of building simulation towards nZEB target: case studies, AiCARR-REHVA Seminar "Towards nearly-Zero Energy Retrottitted Buildings", Fiera Milano Quartiere Rho, 18 March 2014. - Multi-source Multi-product Systems in Buildings: Renewable Energy vs. zero Energy, Public Lectures "Renewable Energy in Buildings", Ecole Poytechnique Fédérale de Lausanne, Faculté de l'Environnement Naturel, Architectural et Construit, 19 March 2015. - <i>New tools for agricultural and forestry landscapes for an ecologically oriented planning</i>, Conference "Measuring agriculture and rural planning with advanced methods. Part II", EXPO Milano 2015, Italian Pavilon, 31 August 2015.

Invited chairman	<p>He has been invited as a chairperson at:</p> <ul style="list-style-type: none"> - International Conference Energy Forum in Brixen, 2009 edition "Solar Architecture & Urban Planning Building" - International Conference Energy Forum in Brixen, 2010 edition "Solar Skins" - Clima 2013 World Congress, Prague, June 2013. - ISHVAC 2013, Xi'an, China - IBPC 2015, Torino - PLEA 2015, Bologna - SEB-16 2016, Torino - 3rd BSA, 2017, Bozen
Research projects as principal investigator	<p>2011-2013: Piedmont Region, Measure I.1.3 "Polo di Innovazione" - POR FESR 07/13; Project name: Sol-HePCM (Topic: Innovative solar collector based on slurry-PCM); Duration: 32 month; Role: PI of Research Unit of the University of Torino.</p> <p>2014-2016: Munters Italy, Development and validation of a tool for the determination of the indoor environmental conditions and the energy consumptions of broiler houses.</p> <p>2015-ongoing: SIR 2014 (project RBSI141A3A) Italian Ministry of Education; Project name: EPAnHaus – Energy performance certification of livestock houses. Duration 24 months.</p> <p>2016-ongoing: Starting Grant 2016 Compagnia di San Paolo; Duration 24 months.</p>
Peer Review	<p>In charge of the evaluation of the full proposals of the UE COST Open Call oc-2013-2 in the domain of Transport and Urban Development; participation to the External Expert Panel meeting (Brussels, 24-25 February 2014).</p> <p>Reviewer for the Estonian Research Council in the research program ETag (2015).</p> <p>Reviewer for the Chilean National Science and Technology Commission in the research program FONDECYT 2015 (2015).</p> <p>Reviewer for the Swiss National Science Foundation in the research program NRP 70 "Energy Turnaround" (2014).</p> <p>Reviewer for the French National Research Agency ANR in the CEA research program HABISOL "Habitat et solaire intelligent photovoltaïque" 2010 edition.</p> <p>Invited Jury Member in PhD final dissertation at Universitat La Salle Ramon Llull, Barcelona, 22 May 2015.</p>

Peer Review (cont.)

Reviewer for the following **international journals**:

- Energy and Buildings - Elsevier (2009, 2010, 2011, 2012, 2013, 2015, 2016, 2017)*
- Building and Environment – Elsevier (2009, 2010, 2014, 2015)*
- Applied Energy – Elsevier (2011, 2012, 2013, 2014, 2015, 2016, 2017)*
- Solar Energy – Elsevier (2010, 2011, 2012, 2015, 2016)*
- Energy – Elsevier (2012, 2013, 2014, 2015, 2016)*
- Building Simulation – Springer (2014, 2015)*
- Journal of Civil Engineering and Management – Taylor & Francis (2011, 2013)*
- Journal of Building Performance Simulation – Taylor & Francis (2015)*
- Science and Technology for the Built Environment – Taylor & Francis (2015)*
- Journal of Energy Engineering – ASCE (2014)*
- Environmental Engineering and Management Journal - ASACHI (2012)*
- Energies – MDPI (2012, 2014, 2015, 2016)*
- Energy Efficiency – Springer (2014, 2015, 2016)*
- Energy Conversion and Management – Elsevier (2014, 2015)*
- Computers Environment and Urban Systems – Elsevier (2013, 2014, 2016)*
- Computer Applications in Engineering Education – Wiley (2015)*
- Proceedings of the Institution of Civil Engineers journal Energy - ICE (2015)*
- The Science of the Total Environment – Elsevier (2014)*
- International Journal of Biometeorology (2015, 2016)*
- IET Generation, Transmission & Distribution – IET (2015)*
- Sustainable Cities and Societies – Elsevier (2015, 2016)
- Journal of Energy Storage – Elsevier (2015)
- International Journal of Sustainable Energy – Taylor & Francis (2014)
- Sustainability – MDPI (2015)
- Architectural Science Review (2013)
- QScience Connect (2011)
- International Journal of Engineering Science and Technology – ENGG (2011)
- Journal of Healthcare Engineering – Multi Science (2013, 2014)

* Indexed by Thomson Reuters Web of Science with Impact Factor

He has been in the Revision Board of the **international conferences**:

- CIFQ 2009 - IX^{ème} Colloque inter-universitaire Franco-Québécois sur la thermique des systèmes, Lille, 2009
- Building Simulation 2013, Chambéry
- Clima 2013, Prague
- Sustainability in Energy and Buildings 2014, Cardiff
- BSA 2015, Bozen
- Greenbuild Europe & Mediterranean 2015, Verona
- 6th International Building Physics Conference IBPC 2015, Torino
- Building Simulation 2015, Hyderabad
- ATI 2015, Roma
- SEB-16, Torino
- Building Simulation 2017, San Francisco

He has been in the Scientific Committee of the “Innovazione tecnologica sostenibile in edilizia” series of seminars, March-April 2011 and invited speaker for the talk “The Energy modelling” (20 April 2011).

He is within the Scientific Committee of the “SBE16 Build Green and Renovate Deep” Conference, October 2016, Tallin (Estonia).

Guest editor of the special issue “Citizen and Sustainable Society” of the Sustainable Cities and Society journal (2016).

Teaching and Student supervisions	<p>At the Politecnico di Torino he is teaching the course: Building physics design: energy efficiency and systems (2016-17); Indoor environment climate control, lighting and acoustics (2015-16, 2016-17).</p> <p>At the University of Torino he has been teaching the courses of:</p> <ul style="list-style-type: none"> - Architectural Design, Degree Level, 80 hours (2013-14, 2014-15) - Environmental control of dairy farm buildings, Master Level, 10 hours (2011-12, 2015-16) - Techniques for the energy retrofitting of alpine buildings, Degree Level, 24 hours (2011-12, 2010-11, 2009-10) - Energy conscious design of rural buildings, Degree Level, 60 hours (2008-09) <p>From 2004 to 2007 he has been teaching assistant at the I Faculty of Engineering and at the I Faculty of Architecture of the Politecnico di Torino for courses related to the indoor environmental engineering, the thermal design of indoor environments and systems and plants for the exploitation of renewable sources.</p> <p>Contract professor (Enseignant Temporaire)</p> <ul style="list-style-type: none"> - ESTP – Ecole Spéciale des Travaux Publics du Bâtiment et de l'Industrie, Paris (Cachan), March 2015 - 18 hours, April 2016 - 12 hours and February 2017 – 16 hours (Simulation Thermique Dynamique), Génie Energétique et de la Construction Durable, 3ème année. - IUT Lyon 1- La refonte EPBD et l'analyse technico-économique des bâtiments à haute performance, IUT Lyon 1, Master Génie civil - Bâtiment à Haute Efficacité Energétique, 21 November 201, 4 hours. <p>He has been supervisors of 28 Master Degrees and 13 Degrees discussed at the Architectural Sciences, Energy Engineering, Civil Engineering Courses of the Politecnico di Torino and at the Agricultural Sciences Courses of the University of Torino.</p> <p>He has been co-supervisor of the PhD thesis (Doctorate School SCUDO of the Politecnico di Torino, PhD Course in “Technological Innovation for the Built Environment”):</p> <ul style="list-style-type: none"> - <i>Rational use of energy flow and material in industrial settings</i>, discussed in 2013 - <i>Scalable dynamic simulation-based methodology for the energy retrofit of existing buildings</i>, to be discussed in 2015; <p>He is now co-supervisor of the following PhD thesis:</p> <ul style="list-style-type: none"> - <i>Simulation-based optimization of high performing buildings in future energy scenarios</i>, 2014-2017. - <i>Multi-source multi-product systems for the food industry</i>, 2014-2017. <p>He has been teaching in various Life Learning courses organized by AiCARR Formazione (2014, 2015), Collegio dei Geometri di Torino (2011-2014), Collegio dei Geometri di Cuneo (2011-2012), Forte Chance Piemonte (2011), Apitorma (2011), Edizioni Ambiente (2013)</p>
Scientific Qualifications	<p>He has been awarded (2012) the Scientific qualification as Maître des Conférences by the French Ministry of Education in the following sector: 60 - Mécanique, génie mécanique, génie civil</p> <p>He has been awarded (2014) the Italian National Scientific Qualification (art.16 of the law 30 December 2010, n.240) in the following sectors: 07/C1 – Ingegneria agraria, forestale e dei biosistemi 09/C2 – Fisica tecnica e ingegneria nucleare</p>

Publications**Scopus informations**

Author ID 16028531800

Documents 55

Citations 491 (total), 400 (excluding self citations) , 368 (excluding self citations of all co-authors)
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Of more than 150 publications (see List), he is co-author of **30** research articles on the ISI journals **Renewable and Sustainable Energy Reviews** (IF=6,02), **Energy and Buildings** (IF=2,38), **Solar Energy** (IF=2,01) and **Renewable Energy** (IF=2,23), **HVAC&R Research** (IF=0,68), **Applied Energy** (IF=5,11), **Int Jour of Green Energy** (IF=2,07), **Building Simulation** (IF=0,82) and **Energy for Sustainable Development** (IF=1,63).

He is single author of two articles on ISI journals (13, 9). The most cited articles are articles # 7, 1, 6 and 14.

He also wrote **two didactic books** concerning the fundamentals and the applications of the thermal building physics (in Italian), the **AiCARR** guide “**Introduction to thermal building simulation**” (in Italian) and took part to many **international conferences** of REHVA, IBPSA, AiCARR, EurAgEng, national AiCARR, ATI and AIIA conferences, and published on the REHVA and AiCARR official journals.

Presenter at the following international conferences: AICARR 2006, EPIC 2006, CLIMA 2007, COBEE 2008, Climamed 2011, Building Simulation 2011, FIG International Conference 2012, 10th AIIA Conference 2013, SHC 2013, ISHVAC 2013, 49° Convegno Internazionale AICARR 2014, Input 2014, SEB-2014, ASME-ATI-UIT Conference 2015, IBPC 2015, SEB-16 Conference.

Presenter at the following national conferences: 61° Congresso ATI 2006, 62° Congresso ATI 2007, 63° Congresso ATI, AIIA - R.U.R.A.L.I.A. 2008, AICARR 2008, AICARR CT Refrigerazione 2008, 64° Congresso ATI 2009, IX Congresso Nazionale AIIA 2009, Bioedilizia Italia 2009, 65° Congresso Nazionale ATI 2010, I Forum Interdisciplinare dei giovani ricercatori per le Alpi di domani 2010, 67° Congresso Nazionale ATI 2012, AIIA II Sezione 2012, Congresso Nazionale ATI 2015, Congresso Nazionale ATI 2016.

Torino, March 2017

Enrico Fabrizio

Publications list of Enrico Fabrizio

A) Articles on ISI international journals

1. V. Corrado, E. Fabrizio, [Assessment of building cooling energy need through a quasi-steady state model: simplified correlation for gain-loss mismatch](#), Energy and Buildings, ISSN 0378-7788, vol. 39, n. 5 (2007), pp. 569-579. Doi:10.1016/j.enbuild.2006.09.012.
2. S.P.Cornati, E. Fabrizio, M. Filippi, [The impact of indoor thermal conditions, system controls and building types on the building energy demand](#), Energy and Buildings, ISSN 0378-7788, vol. 40, n. 4 (2008), pp. 627-636. Doi:10.1016/j.enbuild.2007.04.017.
3. Y. Raffenel, E. Fabrizio, J. Virgone, E. Blanco, M. Filippi, [Integrated solar heating systems: from initial sizing to dynamic simulation](#), Solar Energy, ISSN 0038-092X, vol. 83, n. 5 (2009), pp. 657-663. Doi:10.1016/j.solener.2008.10.021.
4. E. Fabrizio, M. Filippi, J. Virgone, [Trade-off between environmental and economic objectives in the optimization of multi-energy systems](#), Building Simulation: An International Journal, ISSN 1996-3599, vol. 2, n. 1 (2009), pp. 29-40. Doi:10.1007/s12273-009-9202-4.
5. E. Fabrizio, M. Filippi, J. Virgone, [An hourly modelling framework for the assessment of energy sources exploitation and energy converters selection and sizing in buildings](#), Energy and Buildings, ISSN 0378-7788, vol. 41, n. 10 (2009), pp. 1037-1050. Doi:10.1016/j.enbuild.2009.05.005.
6. R. Chiabrandi, E. Fabrizio, G. Garnero, [The territorial and landscape impacts of photovoltaic systems: definition of impacts and assessment of the glare risk](#), Renewable and Sustainable Energy Reviews, ISSN 1364-0321, vol. 13, n. 9 (2009), pp. 2441-2451. Doi: 10.1016/j.rser.2009.06.008.
7. E. Fabrizio, V. Corrado, M. Filippi, [A model to design and optimize multi-energy systems in buildings at the design concept stage](#), Renewable Energy, ISSN 0960-1481, vol. 35, n. 3 (2010), pp. 644-655. Doi: 10.1016/j.renene.2009.08.012.
8. R. Chiabrandi, E. Fabrizio, G. Garnero, [On the applicability of the visual impact assessment OAI_{SPP} tool to photovoltaic plants](#), Renewable and Sustainable Energy Reviews, ISSN 1364-0321, vol. 15, n. 1 (2011), pp. 845-850. Doi: 10.1016/j.rser.2010.09.030.
9. E. Fabrizio, [Feasibility of polygeneration in energy supply systems for health-care facilities under the Italian climate and boundary conditions](#), Energy for Sustainable Development, ISSN 0973-0826, in press. Doi: 10.1016/j.esd.2011.01.003.
10. S.P.Cornati, E. Fabrizio, D. Raimondo, M. Filippi, [Categories of indoor environmental quality and building energy demand for heating and cooling](#), Building Simulation: An International Journal, ISSN 1996-3599, vol. 4, n. 2 (2011), pp. 97-105. Doi:10.1007/s12273-011-0023-x.
11. M. Bayraktar, E. Fabrizio, M. Perino, [The «Extended Building Energy Hub»: a new method for the simultaneous optimization of energy demand and energy supply in buildings](#), HVAC&R Research, ISSN 1078-9669, vol. 18, n°1-2 (2012), pp. 67-87. Doi: 10.1080/10789669.2011.588300.
12. E. Fabrizio, S.P. Cognati, F. Causone, M. Filippi, [Numerical comparison between energy and comfort performances of radiant heating and cooling systems versus air systems](#), HVAC&R Research, ISSN 1078-9669, vol. 18, n° 4 (2012), pp. 692-708. Doi: 10.1080/10789669.2011.578700.
13. E. Fabrizio, [Energy reduction measures in agricultural greenhouses heating: envelope, systems and solar energy collection](#), Energy and Buildings, ISSN 0378-7788, vol. 53 (2012), pp. 57-63. Doi: 10.1016/j.enbuild.2012.07.003.
14. S.P. Cognati, E. Fabrizio, M. Filippi, V. Monetti, [Reference Buildings for cost optimal analysis: Method of definition and application](#), Applied Energy, ISSN 0306-2619, vol. 102 (2013), pp. 983-993. Doi: 10.1016/j.apenergy.2012.06.001.
15. E. Fabrizio, F. Seguro, M. Filippi, [Integrated HVAC and DHW production systems for Zero Energy Buildings](#), Renewable and Sustainable Energy Reviews, ISSN 1364-0321, vol. 40 (2014), pp. 515-541. Doi: 10.1016/j.rser.2014.07.193.
16. M. Ferrara, E. Fabrizio, M. Filippi, J. Virgone, [A simulation-based optimization method for cost-optimal analysis of nearly Zero Energy Buildings](#), Energy and Buildings, ISSN 0378-7788, vol. 84 (2014), pp. 442-457. Doi: 10.1016/j.enbuild.2014.08.031
17. E. Borgogno Mondino, E. Fabrizio, R. Chiabrandi, [Site selection of large ground-mounted photovoltaic plants: A GIS decision support system and an application to Italy](#), International Journal of Green Energy, ISSN 1543-5075, in press. Doi: 10.1080/15435075.2013.858047.
18. C. Becchio, P. Dabbene, E. Fabrizio, V. Monetti, M. Filippi, [Cost optimality assessment of a single family house: Building and technical systems solutions for the nZEB target](#), Energy and Buildings, ISSN 0378-7788, vol. 90 (2015), pp. 173-187. Doi:10.1016/j.enbuild.2014.12.050.
19. E. Fabrizio, V. Monetti, [Methodologies and advancements in the calibration of building energy models](#), Energies, ISSN 1996-1073, vol. 8, n° 4 (2015), pp. 2548-2574. Doi: 10.3390/en8042548.

20. V. Monetti, E. Fabrizio, M. Filippi, [Impact of low investment strategies for space heating control: application of thermostatic radiators valves to an old residential building](#), Energy and Buildings, ISSN 0378-7788, vol. 95 (2015), pp. 202-210. Doi: 10.1016/j.enbuild.2015.01.001.
21. G. Garnero, E. Fabrizio, [Visibility analysis in urban spaces: a raster-based approach and case studies](#), Environment and Planning B: Planning and Design, ISSN 0265-8135, vol. 42, n° 4 (2015), pp. 688-707. Doi: 10.1068/b130119p.
22. M. Azaza, K. Echaieb, F. Tadeo, E. Fabrizio, A. Iqbal, A. Mami, [Fuzzy decoupling control of greenhouse climate](#), Arabian Journal for Science and Engineering, ISSN 1319-8025, vol. 40, n° 9 (2015), pp. 2805-2812. Doi: 10.1007/s13369-015-1719-5.
23. G. Serale, E. Fabrizio, M. Perino, [Design of a low-temperature solar heating system based on a slurry phase change material \(PCS\)](#), Energy and Buildings, ISSN 0378-7788, , vol. 106 (2015) SI: IEA-EICES Annex 31 Special Issue on Thermal Energy Storage, pp. 44-58. Doi: 10.1016/j.enbuild.2015.06.063
24. M. Azaza, C. Tanougast, E. Fabrizio, A. Mami, [Smart greenhouse fuzzy logic based control system enhanced with wireless data monitoring](#), ISA Transactions, ISSN 0019-0578, vol. 61 (2016), pp. 297-307. Doi: 10.1016/j.isatra.2015.12.006.
25. M. Ferrara, E. Fabrizio, J. Virgone, M. Filippi, [Energy systems in cost-optimized design of nearly zero-energy buildings](#), Automation in Construction, ISSN 0926-5805, vol. 70 (2016), pp. 109-127. Doi: 10.1016/j.autcon.2016.06.007.
26. E. Fabrizio, V. Branciforti, A. Costantino, M. Filippi, S. Barbero, G. Tecco, P. Mollo, A. Molino, [Monitoring and managing of a micro-smart grid for renewable sources exploitation in an agro-industrial site](#), Sustainable Cities and Society, ISSN 2210-6707, vol. 28 (2017), pp. 88-100. Doi: 10.1016/j.scs.2016.08.026.
27. M. Azaza, K. Echaieb, E. Fabrizio, A. Iqbal, A. Mami, [An intelligent system for the climate control and energy savings in agricultural greenhouses](#), Energy Efficiency, ISSN 1570-646X, vol. 9, n° 6 (2016), pp. 1241-1255., in press. Doi: 10.1007/s12053-015-9421-8.
28. E. Fabrizio, V. Branciforti, A. Costantino, M. Filippi, S. Barbero, G. Tecco, P. Mollo, A. Molino, [Monitoring and managing of a micro-smart grid for renewable sources exploitation in an agro-industrial site](#), Sustainable Cities and Society, ISSN 2210-6707, vol. 28 (2017), pp. 88-100. Doi: 10.1016/j.scs.2016.08.026.
29. G. Kazas, E. Fabrizio, M. Perino, [Energy demand profile generation with detailed time resolution at an urban district scale: a reference building approach and case study](#), Applied Energy, ISSN 0306-2619, in press. Doi: 10.1016/j.apenergy.2017.01.095
30. A. Biglia, L. Comba, E. Fabrizio, P. Gay, D. Ricauda Aimonino, [Steam batch thermal processes in unsteady state conditions: Modelling and application to a case study in the food industry](#), Applied Thermal Engineering, ISSN 1359-4311, vol 118 (2017), pp. 638-651. Doi: 10.1016/j.applthermaleng.2017.03.004.

B) Publications on international books & Scopus indexed series, journals and conferences

31. V. Corrado, E. Fabrizio, [A simplified calculation method of the annual energy use for space heating and cooling: assessment of the dynamic parameters for the Italian building stock and climate](#) (8 p.) in P. Fazio, H. Ge, J. Rao, G. Desmarais (a cura di), %Research in Building Physics and Building Engineering+, Taylor & Francis/Balkema, London, 2006, pp. 645-653 (ISBN 0-415-41675-2).
32. V. Corrado, H. E. Mechri, E. Fabrizio, [Building energy performance assessment through simplified models: application of the ISO 13790 quasi-steady state method](#), BS Building Simulation 2007, Beijing, 3-6 September 2007, pp. 79-86.
33. M. Filippi, E. Fabrizio, [Sustainable building in Italy: the rules, professions and the market](#) in M. Symes, I. Cooper (a cura di), %Sustainable Urban Development 4: Changing Professional Practice+, Routledge, London, 2008, pp. 250-272 (ISBN 978-0-415-43822-3).
34. E. Fabrizio, M. Torbino, M. Filippi, [Operational optimization of actual energy systems by means of the energy hub theory](#), in V. Soebarto, H. Bennetts, P. Bannister, P.C. Thomas, D. Leach (a cura di), %Driving better design through simulation+, IBPSA Australia & AIRAH, Melbourne, 2011, pp. 2793-2798 (ISBN 978-0-646-56510-1).
35. E. Fabrizio, D. Guglielmino, V. Monetti, [Italian benchmark building models: the office building](#), in V. Soebarto, H. Bennetts, P. Bannister, P.C. Thomas, D. Leach (a cura di), %Driving better design through simulation+, IBPSA Australia & AIRAH, Melbourne, 2011, pp. 1981-1988 (ISBN 978-0-646-56510-1).
36. C. Becchio, P. Cantamessa, E. Fabrizio, P. Florio, V. Monetti, M. Filippi, [Dynamic simulation of BACS \(Building Automation and Control Systems\) for the energy retrofitting of a secondary school](#), BS 2013 Chambéry, 25-28 August 2013, pp. 2060-2068 (ISBN 978-2-7466-6294-0).
37. V. Monetti, E. Fabrizio, M. Filippi, [Influence of different temperature control patterns through TRV on district heating loads](#), Proceedings of the 8th International Symposium on Heating, Ventilation and Air

Conditioning ISHVAC 2013, Xian (China), 19-21 October 2013, Lecture Notes in Electrical Engineering, ISBN 978-3-642-39577-2 (2014), pp. 251-258.

38. E. Fabrizio, G. Airoldi, R. Chiabrando, [Study of the environmental control of sow farrowing rooms by means of dynamic simulation](#), Proceedings of the 8th International Symposium on Heating, Ventilation and Air Conditioning ISHVAC 2013, Xian (China), 19-21 October 2013, Lecture Notes in Electrical Engineering, ISBN 978-3-642-39577-2 (2014), pp. 3-11.
39. E. Borgogno Mondino, E. Fabrizio, R. Chiabrando, [A GIS tool for the land carrying capacity of large solar plants](#), Energy Procedia, ISSN 1876-6102, vol. 48C (2014), pp. 1576-1585. Doi: 10.1016/j.egypro.2014.02.178.
40. G. Garnero, E. Fabrizio, [Visibility maps of Turin. Including atmospheric conditions in DSM viewshed analysis](#), GIM International, ISSN 1566-9076, vol. 28, n. 4 (2014), pp. 27-29.
41. C. Becchio, S.P. Cognati, E. Fabrizio, V. Monetti, F. Seguro, [Application of the LEED PRM to an Italian existing building](#), Sustainability in Energy and Buildings, SEB-14, Cardiff (Wales, UK), 25-27 June 2014, Energy Procedia, ISSN 1876-6102, vol. 62 (2014), pp. 141-149. Doi: 10.1016/j.egypro.2014.12.375
42. M. Ferrara, J. Virgone, E. Fabrizio, F. Kuznik, M. Filippi, [Modelling Zero Energy Buildings: parametric study for the technical optimization](#), Sustainability in Energy and Buildings, SEB-14, Cardiff (Wales, UK), 25-27 June 2014, Energy Procedia, ISSN 1876-6102, vol. 62 (2014), pp. 200-209. Doi: 10.1016/j.egypro.2014.12.381
43. G. Serale, Y. Cascone, A. Capozzoli, E. Fabrizio, M. Perino, [Potentialities of a low temperature solar heating system based on slurry phase change materials \(PCS\)](#), Sustainability in Energy and Buildings, SEB-14, Cardiff (Wales, UK), 25-27 June 2014, Energy Procedia, ISSN 1876-6102, vol. 62 (2014), pp. 355-363. Doi: 10.1016/j.egypro.2014.12.397.
44. M. Ferrara, E. Fabrizio, J. Virgone, M. Filippi, [Apprising the effect of the primary systems on the cost optimal design of nZEB: A case study in two different climates](#), IBPC 2015, Torino, 13-15 June 2015, Energy Procedia, ISSN 1876-6102, vol. 78 (2015), pp. 2028-2033. Doi: 10.1016/j.egypro.2015.11.200.
45. E. Fabrizio, M. Ferrara, G. Urone, S.P. Cognati, S. Pronzati, M. Filippi, [Performance assessment of a solar assisted ground source heat pump in a mountain site](#), IBPC 2015, Torino, 13-15 June 2015, Energy Procedia, ISSN 1876-6102, vol. 78 (2015), pp. 2286-2291. Doi: 10.1016/j.egypro.2015.11.366.
46. V. Monetti, E. Dauvin, E. Fabrizio, P. André, M. Filippi, [Calibration of building energy simulation modelsbased on optimization: A case study](#), IBPC 2015, Torino, 13-15 June 2015, Energy Procedia, ISSN 1876-6102, vol. 78 (2015), pp. 2971-2976. Doi: 10.1016/j.egypro.2015.11.693.
47. G. Kazas, E. Fabrizio, M. Perino, [Energy demand profiles assessment at district scale: A stochastic approach for a block of buildings demand profiles generation](#), IBPC 2015, Torino, 13-15 June 2015, Energy Procedia, ISSN 1876-6102, vol. 82 (2015), pp. 3410-3415. Doi: 10.1016/j.egypro.2015.11.610.
48. E. Fabrizio, A. Ghiggini, M. Bariani, [Energy performance and indoor environmental control of animal houses: a modelling tool](#), ATI 2015 - 70th Conference of the ATI Engineering Association, Rome, 9-11 September 2015, Energy Procedia, ISSN 1876-6102, vol. 82 (2015), pp. 439-444. Doi: 10.1016/j.egypro.2015.11.833.
49. A. Biglia, E. Fabrizio, M. Ferrara, P. Gay, D. Ricauda Aimino, [Performance assessment of a multi-energy system for a food industry](#), ATI 2015 - 70th Conference of the ATI Engineering Association, Rome, 9-11 September 2015, Energy Procedia, ISSN 1876-6102, vol. 82 (2015), pp. 540-545. Doi: 10.1016/j.egypro.2015.11.867.
50. M. Ferrara, E. Sirombo, E. Fabrizio, M. Filippi, [Comfort filters in a total energy demand optimization method for the passive design of a building](#), Sustainability in Energy and Buildings, SEB-15, Lisbon, 1-3 July 2015, Energy Procedia, ISSN 1876-6102, vol. 83 (2015), pp. 418-427. Doi: 10.1016/j.egypro.2015.12.161.
51. E. Fabrizio, M. Ferrara, V. Monetti, [Smart heating systems for cost-effective retrofitting](#), in F. Pacheco-Torgal, C. Granqvist, B. Jelle, G. Vanoli, N. Bianco, J. Kurnitski (Eds.), [Cost-effective energy efficient building retrofitting. Materials, technologies, optimization and case studies](#), Elsevier - Woodhead Publishing, 2017, pp. 277-302 (ISBN 978-0-08-101128-7). Doi: 10.1016/B978-0-08-101128-7.00010-1.
52. A. Costantino, E. Fabrizio, A. Biglia, P. Cornale, L. Battaglini, [Energy use for climate control of animal houses: the state of the art in Europe](#), ATI 2016 . 71st Conference of the ATI Engineering Association, Torino, 14-16 September 2016, Energy Procedia, ISSN 1876-6102, in press, vol. XX (2016), pp. XX-XX. Doi: 10.1016/j.egypro.2016.11.024.
53. M. Ferrara, E. Sirombo, A. Monti, E. Fabrizio, M. Filippi, [Influence of envelope design in the optimization of the operational energy costs of a multi-family building](#), ATI 2016 . 71st Conference of the ATI Engineering Association, Torino, 14-16 September 2016, Energy Procedia, ISSN 1876-6102, in press, vol. XX (2016), pp. XX-XX.
54. A. Biglia, L. Comba, E. Fabrizio, P. Gay, D. Ricauda Aimino, [Case studies in food freezing at very low temperature](#), ATI 2016 . 71st Conference of the ATI Engineering Association, Torino, 14-16 September

- 2016, Energy Procedia, ISSN 1876-6102, in press, vol. XX (2016), pp. XX-XX. Doi: 10.1016/j.egypro.2016.11.039.
55. E. Fabrizio; A. Biglia; V. Branciforti; M. Filippi; S. Barbero; G. Tecco; P. Mollo; A. Molino, *Monitoring of a micro-smart grid: power consumption data of some machineries of an agro-industrial test site*, Data in Brief, ISSN 2352-3409, in press. Doi: 10.1016/j.dib.2016.12.033.

C) PhD Dissertation

56. E. Fabrizio, [Modelling of multi-energy systems in buildings](#), PhD Dissertation submitted to Politecnico di Torino and Institut National des Sciences Appliquées de Lyon, discussed on July2nd 2008 (résumé en français: [Modélisation des systèmes multi-énergies dans les bâtiments](#)).

D) Proceedings of international conferences

57. S.P. Cognati, E. Fabrizio, M. Filippi, *Energy and comfort: mutual relation between thermal comfort and energy demand in office buildings*, Convegno Internazionale AICARR %VAC&R. Tecnologie, norme, mercato+, Milano, 1-2 marzo 2006, pp. 587-597.
58. J. Virgone, E. Fabrizio, Y. Raffenel, E. Blanco, G. Thomas, [Commande des systèmes multi-énergies pour les bâtiments à haute performance énergétique](#), Relazione presentata al Convegno SFT . IBPSA France « Efficacité énergétique des bâtiments. Vers des bâtiments autonomes en énergie », Chambéry 21 marzo 2006.
59. E. Fabrizio, M. Filippi, M. Perino, V. Serra, *Energy efficient envelope retrofit: a case study for a bank data centre*, EPIC 2006 %The 4th European Conference on Energy Performance and Indoor Climate in Buildings+, Lyon, 20-22 November 2006, pp.369-374 (ISBN 2-86834-122-5).
60. V. Corrado, E. Fabrizio, M. Filippi, [Modeling and optimization of multi-energy source building systems in the design concept phase](#), CLIMA 2007 Well Being Indoors, Helsinki, 10-14 June 2007, vol. 4, pp. 253-260 (ISBN 978-952-99898-3-6).
61. E. Fabrizio, M. Filippi, J. Virgone, *Optimization of the energy performance of the system: trade-off between environmental and economic objectives*, COBEE The First International Conference on Building Energy and Environment, Dalian (China), 13-16 July 2008, vol. 1, pp. 316-323 (ISBN 978-0-9816881-2-1).
62. M. Lo Turco, M. Rebaudengo, E. Fabrizio, A. Trento, *Green BIM: new experiences of software interoperability*, Innovative Design and Construction Technologies. Building complex shapes and beyond - Id&cT09, Milano, 6th-7th May 2009, pp. 367-380 (ISBN 978-88-387-4369-X).
63. E. Fabrizio, R. Jona, *Energy feasibility of the application of polycarbonate and polypropylene sheets in agricultural greenhouses for heating and solar energy collection*, CLIMA 201010th REHVA World Congress %Sustainable Energy Use in Buildings+, Antalya, 9-12 May 2010 (ISBN 978-975-6907-14-6).
64. E. Fabrizio, S.P. Cognati, F. Causone, M. Filippi, L. Schiavio, *Contrasting the energy and comfort performance of radiant heating and cooling system vs. all air systems by numerical simulation*, CLIMA 201010th REHVA World Congress %Sustainable Energy Use in Buildings+, Antalya, 9-12 May 2010 (ISBN 978-975-6907-14-6).
65. M. Bayraktar, E. Fabrizio, M. Perino, *A method for simultaneous optimization of energy demand and energy supply in buildings*, IAQVEC 2010 The 7th International Conference on Indoor Air Quality, Ventilation and Energy Conservation in Buildings, Syracuse (USA), 15-18 August 2010, paper ref. 176-208.
66. E. Fabrizio, J. Virgone, M. Filippi, *Analyse des systèmes multi-énergie par la méthode du « Energy Hub » au service des bâtiments à haute performance*, Conférence IBPSA France 2010, Moret-sur-Loing (Ile de France), 9-10 novembre 2010.
67. C. Becchio, D. Guglielmino, E. Fabrizio, M. Filippi, *Whole cost analysis of building envelope technologies according to the European Standard EN 15459*, Climamed q1 VI Congreso Mediterraneo de Climatizacion, Madrid 2-3 giugno 2011, ATECYR, pp. 291-306 (ISBN 978-84-95010-41-4).
68. E. Fabrizio, P. Gay, D. Ricauda Aimonino, *Modelling of steam storage vessels for batch processes in food plants*, Convegno di medio termine dell'Associazione Italiana di Ingegneria Agraria %Gestione e controllo dei sistemi agrari e forestali+, Belgirate, 22-24 settembre 2011, paper C-14, pp. 1-7 (ISBN 978-88-906273-0-9).
69. E. Fabrizio, G. Garnero, *Visual impact, landscape and renewable energy plants: the case of PV*, Proc. of the FIG Working Week 2012, Roma 6-10 maggio 2012, paper n° 5946, pp. 1-8 (ISBN 97887-90907-98-3).

70. C. Becchio, E. Fabrizio, V. Monetti, M. Filippi, *Cost optimal levels of energy requirements for nearly-ZEB: application to an Italian reference building for existing offices*, CLIMA 2013 11th REHVA World Congress %energy efficient, smart and healthy buildings+, Prague, 16-19 June 2013 (ISBN 978-80-260-4001-9).
71. E. Fabrizio, G. Garnero, *The assessment of the visual perception in viewshed analysis for the landscape settings*, Proceedings of the 10th Conference of the Italian Society of Agricultural Engineering %Horizons in agricultural, forestry and biosystems engineering+, Viterbo, 8-12 settembre 2013, Journal of Agricultural Engineering, ISSN 1974-7071, vol. XLIV s2 (September 2013), pp. 478-482. Doi: 10.4081/jae.2013.(s1):e95
72. E. Fabrizio, V. Branciforti, M. Filippi, S. Barbero, G. Tecco, *Modelling and optimization of a micro-smart grid for an agro-industrial site*, Proceedings of the 10th Conference of the Italian Society of Agricultural Engineering %Horizons in agricultural, forestry and biosystems engineering+, Viterbo, 8-12 settembre 2013, Journal of Agricultural Engineering, ISSN 1974-7071, vol. XLIV s2 (September 2013), pp. 560-567. Doi: 10.4081/jae.2013.(s1):e111
73. C. Becchio, S.P. Cognati, V. Monetti, E. Fabrizio, *From high performing buildings to nearly zero energy buildings: potential of an existing office building*, Climamed q3 Proceedins Book, VII Mediterranean Congress of Climatization, Istanbul, 3-4 october 2013, Secil Ofset, Istanbul, pp. 72-81. (ISBN 978-975-6907-17-7).
74. M. Ferrara, J. Virgone, E. Fabrizio, F. Kuznik, M. Filippi, *Modeling Zero Energy Building: technical and economical optimization*, Climamed q3 VII Mediterranean Congress of Climatization, Istanbul, 3-4 october 2013, Secil Ofset, Istanbul, pp. 199-208. (ISBN 978-975-6907-17-7).
75. V. Monetti, E. Fabrizio, M. Filippi, *Impact of low investment strategies for space heating control: application of thermostatic radiator valves to an old residential building*, 49° Convegno Internazionale AICARR %Historical and existing buildings: designing the retrofit+, Rome 26th-27th-28th February 2014, pp. 323-335 (ISBN 978-88-95620-18-3).
76. C. Becchio, S.P. Cognati, E. Fabrizio, N. Ganic, V. Monetti, A.Z. Ylmaz, *Application of the cost optimal methodology to two European case studies: an Italian and a Turkish retrofitted existing office buildings*, 49° Convegno Internazionale AICARR %Historical and existing buildings: designing the retrofit+, Rome 26th-27th-28th February 2014, pp. 427-441 (ISBN 978-88-95620-18-3).
77. E. Fabrizio, G. Garnero, *Visual impact in the urban environment. The case of out-of-scale buildings*, TEMA, ISSN 1970-9889, vol. Special Issue Input 2014 (2014), pp. 377-388. Doi: <http://dx.doi.org/10.6092/1970-9870%2F2477>.
78. E. Fabrizio, A. Ghiggini, *A dynamic model for the calculation of annual energy con-sumptions of indoor environmental control in broiler houses*, Proceedings of the International Conference of Agricultural Engineering . AgEng 2014 Zurich, 6-10 July 2014 (ISBN 978-0-9930236-0-6).
79. A. Deiana, E. Fabrizio, R. Gerboni, *Energy performance optimization of typical Chinese solar greenhouses by means of dynamic simulation*, Proceedings of the International Conference of Agricultural Engineering . AgEng 2014 Zurich, 6-10 July 2014 (ISBN 978-0-9930236-0-6).
80. A. Biglia, F.V. Caredda, E. Fabrizio, M. Filippi, N. Mandas, *Modelling of the energy system of the AOB hospital with the energy hub approach*, ASME-ATI-UIT Conference 2015, Naples, 17-20 May 2015.
81. A. Biglia, E. Fabrizio, M. Ferrara, P. Gay, D. Ricauda Aimonino, *Modelling and calibration of a multi-energy system in a chocolate industry*, AIIA Mid Term Conference %New Frontiers of Biosystems and Agricultural Engineering for Feeding the Planet+, Napoli, 22-23 June 2015 (winner of the best poster award).
82. V. Monetti, E. Davin, E. Fabrizio, P. André, M. Filippi, *Optimization-based calibration for the building performance energy simulation: A case study*, BS 2015 Hyderabad, 7-9 December 2015, pp. 2060-2068 (ISBN 978-2-7466-6294-0).
83. E. Lenta, A. Ferrero, V. Monetti, E. Fabrizio, M. Filippi, *How to apply building energy performance simulation at the various design stages: A receipts approach*, BS 2015 Hyderabad, 7-9 December 2015, pp. 2060-2068 (ISBN 978-2-7466-6294-0).
84. M. Ferrara, V. Monetti, E. Fabrizio, *Results from cost optimal analyses across Europe: methodological aspects*, CLIMA 2016 12th REHVA World Congress, Aalborg, 22-25 May 2016, in P.K. Heiselberg (ed.), CLIMA 2016 - Proceedings of the 12th REHVA World Congress: volume 6 (ISBN 87-91606-31-4).
85. U. Strith, S. Seddegh, W. Choi, N. Stathopoulos, M. El Mankibi, E. Fabrizio, M. Mastani Joybari, F. Haghighat, R. Ooka, *Integration of Thermal Energy Storage Components with Buildings . Recent Development and Challenges*, CLIMA 2016 12th REHVA World Congress, Aalborg, 22-25 May 2016, in P.K. Heiselberg (ed.), CLIMA 2016 - Proceedings of the 12th REHVA World Congress: volume 4 (ISBN 87-91606-29-2).
86. A. Costantino, E. Fabrizio, A. Biglia, P. Cornale, L. Battaglini, *Benchmarks of energy performance for the indoor climate control of livestock houses*, Proceedings of CIGR-AgEng 2016 Conference, Aarhus, DK.
87. A. Biglia, L. Comba, E. Fabrizio, P. Gay, D. Ricauda Aimonino, *Dynamic simulation of steam storage systems for food plants*, Proceedings of CIGR-AgEng 2016 Conference, Aarhus, DK.

88. M. Alvand, Z. Gholami, M. Ferrara, E. Fabrizio, *Assessment of cost optimal solutions for high performance multi-family buildings in Iran*, Sustainability in Energy and Buildings, SEB-16, Torino, 11-13 September 2016, Energy Procedia, ISSN 1876-6102, in press.
89. A. Monti, M. Ferrara, E. Sirombo, E. Fabrizio, M. Filippi, *Influence of envelope design in the optimization of the energy performance of a multi-family building*, Sustainability in Energy and Buildings, SEB-16, Torino, 11-13 September 2016, Energy Procedia, ISSN 1876-6102, in press.
90. A. Costantino, I. Ballarini, E. Fabrizio, *Comparison between simplified and detailed methods for the calculation of heating and cooling energy needs of livestock housing: a case study*, BSA 2017 - 3rd Building Simulation Applications Conference, Bozen, 8-10 February 2017, in press.
91. M. Ferrara, E. Sirombo, E. Fabrizio, *Comparison between energy optimized and cost optimized design of new high performing multi-family buildings through automated optimization*, BSA 2017 - 3rd Building Simulation Applications Conference, Bozen, 8-10 February 2017, in press.
92. I. Ballarini, A. Costantino, D. Dirutigliano, E. Fabrizio, S. Paduas, V. Corrado, *On the cost-optimal design: comparison of quasi-steady-state and dynamic simplified methods of calculation of H/C energy needs*, BSA 2017 - 3rd Building Simulation Applications Conference, Bozen, 8-10 February 2017, in press.

E) Articles on RHEVA [European Federation of Air-Conditioning Associations], AiCARR [Italian Association of Air Conditioning, Heating and Refrigeration] and other journals

93. M. Filippi, S.P. Cognati, E. Fabrizio, *Impiantistica sostenibile: dai sistemi monoenergia a quelli multienergia*, Cda (Condizionamento dell'aria, riscaldamento, refrigerazione) ISSN 0373-7772, Milano, n. 2, febbraio 2007, pp. 42-46.
94. M. Filippi, S.P. Cognati, E. Fabrizio, *Comfort termico sostenibile*, Cda (Condizionamento dell'aria, riscaldamento, refrigerazione) ISSN 0373-7772, Milano, n. 4, aprile 2007, pp. 42-45.
95. E. Fabrizio, M. Perino, *Accumulo di freddo: i vantaggi economici*, Cda (Condizionamento dell'aria, riscaldamento, refrigerazione) ISSN 0373-7772, Milano, n. 9, ottobre 2007, pp. 26-34.
96. M. Filippi, E. Fabrizio, *La costruzione energeticamente sostenibile: dalla Passivhaus ai Greentips*, [RCI](#) (Riscaldamento, Climatizzazione, Idronica) ISSN 1120-8457, Milano, n. 3, marzo 2008, pp. 76-96.
97. J. Virgone, E. Fabrizio, Y. Raffenel, E. Blanco, G. Thomas, *Dimensionnement et contrôle des systèmes multi-énergies pour les bâtiments à haute performance énergétique*, [La Revue 3EI](#), ISSN 1252-770X, Paris, vol. 52, mars 2008, pp. 23-30.
98. E. Fabrizio, [Passivhaus+5](#), rubrica [%Ri_visitati+](#), Il Giornale dell'Architettura, ISSN 1721-5463, n. 61 (aprile 2008), pag. 2.
99. M. Filippi, E. Fabrizio, [Una gestione energetica sostenibile per l'edilizia scolastica](#), Il Progetto Sostenibile, vol. 17, marzo-maggio 2008, pp. 38-43.
100. E. Fabrizio, M. Perino, *Il nuovo Palazzo della Provincia di Torino: efficienza energetica e comfort ambientale*, Atti e Rassegna Tecnica della Società degli Ingegneri e degli Architetti in Torino, ISSN 0004-7287, LXII-3-4, 2008, pp. 66-72.
101. M. Filippi, E. Fabrizio, *Le fonti energetiche rinnovabili*, [RCI](#) (Riscaldamento, Climatizzazione, Idronica) ISSN 1120-8457, Milano, n. 10, ottobre 2008, pp. 58-65.
102. M. Filippi, E. Fabrizio, *Le fonti energetiche non rinnovabili*, [RCI](#) (Riscaldamento, Climatizzazione, Idronica) ISSN 1120-8457, Milano, n. 12, dicembre 2008, pp. 52-58.
103. E. Fabrizio, M. Filippi, *La «fabbrica» della certificazione energetica*, Il Giornale dell'Architettura, ISSN 1721-5463, n. 76 (settembre 2009), pag. 14.
104. E. Fabrizio, *Strumenti per la stima dei consumi. Potenzialità, criticità e utilizzo del software di simulazione dinamica EnergyPlus*, Cda (Condizionamento dell'aria, riscaldamento, refrigerazione) ISSN 0373-7772, Milano, n. 2, febbraio 2009, pp. 14-21.
105. S.P. Cognati, F. Causone, E. Fabrizio, *Verso un %Mondo Radiante+ Scenario attuale e prospettive della climatizzazione a bassa %Exergia+*, [Uponor Più](#), vol. 10 (dicembre 2009), pp. 4-6.
106. E. Fabrizio, C. Miconi, *Bergognone+5*, rubrica [%Ri_visitati+](#), Il Giornale dell'Architettura, ISSN 1721-5463, n. 88 (ottobre-novembre 2010), inserto [%Magazine dell'Architettura+](#), n. 35 pag. 6.
107. E. Fabrizio, D. Guglielmino, L. Rollino
 - 107.a. *Valutazione dei requisiti quantitativi o qualitativi dei protocolli di certificazione per il progetto sostenibile* (2 pp.)
 - 107.b. *Software per il progetto sostenibile* (7 pp.)
- AICARR Journal, ISSN 2038-2723, n. 4, dicembre 2010-gennaio 2011, pp. 58-66.
108. E. Fabrizio, V. Branciforti, *Le fonti energetiche rinnovabili tra valorizzazione e tutela del territorio: il potenziale del Roero e la valutazione degli impatti*, Atti e Rassegna Tecnica della Società degli Ingegneri e degli Architetti in Torino, ISSN 0004-7287, LXV-I, 2011, pp. 77-87.

109. E. Fabrizio, M. Filippi, *Modelli e strumenti informatici per la simulazione e il progetto di sistemi multienergia*, AICARR Journal, ISSN 2038-2723, n. 8, maggio-giugno 2011, pp. 64-72.
110. C. Becchio, S.P. Cognati, E. Fabrizio, M. Filippi, F. Miseric, *Massiccio o leggero? Valutazione energetica, economica e ambientale dello sfruttamento della massa e del corretto abbinamento al sistema impiantistico per il contenimento dei consumi energetici in un edificio per uffici*, Casa&Clima, ISSN 2038-0895, n. 37, anno VII, pp. 78-85.
111. E. Fabrizio, *La energy modelling*, Atti e Rassegna Tecnica della Società degli Ingegneri e degli Architetti in Torino, ISSN 0004-7287, LXVI-1-2-3, aprile-giugno 2012, pp. 263-270.
112. C. Becchio, S.P. Cognati, E. Fabrizio, *La massa termica: le sue potenzialità nel contenimento dei consumi energetici*, InConcreto, n. 109, novembre/dicembre 2012, pp. 10-12.
113. C. Becchio, S.P. Cognati, E. Fabrizio, V. Monetti, *The cost optimal methodology applied to an existing office in Italy*, The REHVA European HVAC Journal, ISSN 1307-3729, vol. 50, n° 5 (2013), pp. 18-22.
114. E. Fabrizio, G. Garner, *Visual impact in the urban environment. The case of out-of-scale buildings*, TEMA, ISSN 1970-9889, vol. Special Issue Input 2014 (2014), pp. 377-388. Doi: <http://dx.doi.org/10.6092/1970-9870%2F2477>.
115. E. Fabrizio, *Systems for Zero Energy Houses*, The REHVA European HVAC Journal, ISSN 1307-3729, vol. 51, n° 6 (2014), pp. 7-10.
116. E. Fabrizio, A. Costantino, A. Ghiggini, M. Bariani, *Il controllo ambientale negli edifici per la produzione avicola: uno strumento per la previsione dei consumi energetici*, La Termotecnica ISSN 1120-8457, Milano, n. 12, luglio-agosto 2016, pp. 57-61.

F) Books

117. V. Corrado, E. Fabrizio, *Applicazioni di termofisica dell'edificio e climatizzazione*, Torino, Clut, 2005, 160 pp., ISBN 88-7992-202-5.
118. V. Corrado, E. Fabrizio, *Applicazioni di termofisica dell'edificio e climatizzazione. Seconda edizione*, Torino, Clut, 2009, 188 pp., ISBN 978-88-7992-281-4.
119. F. Causone, S.P. Cognati, E. Fabrizio, M. Filippi, *Radiant Systems. Technical guideline*. UPONOR, 2009.
120. V. Corrado, E. Fabrizio, *Fondamenti di termofisica dell'edificio e climatizzazione*, Torino, Clut, 2012, 192 pp., ISBN 978-88-7992-288-3.
121. M. Filippi, E. Fabrizio (a cura di), *Introduzione alla simulazione termoenergetica dinamica degli edifici*, Collana Guide AiCARR, Editoriale Delfino, Milano, 2012, 190 pp., ISBN 978-88-97323-14-3.
122. V. Corrado, E. Fabrizio, *Fondamenti di termofisica dell'edificio e climatizzazione*. Seconda edizione, Torino, Clut, 2014, 208 pp., ISBN 978-88-7992-341-5.

G) Book chapters

123. V. Corrado, E. Fabrizio, C. Marino, A. Nucara, M. Pietrafesa, *Sperimentazione di procedure per la valutazione delle prestazioni energetiche dell'edificio: confronto tra modelli dettagliati e semplificati* (47 p.) in M. Filippi, G. Rizzo (a cura di), *Gertificazione energetica e verifica ambientale degli edifici. Valutazioni delle prestazioni energetiche e della sostenibilità delle scelte progettuali*+Palermo, Dario Flaccovio Editore, 2007, pp. 222-268 (ISBN 8877586729).
124. M. Filippi, E. Fabrizio
 - 124.a. *Le fonti energetiche non rinnovabili* (12 pp.)
 - 124.b. *Le fonti energetiche rinnovabili* (9 pp.)
 - 124.c. *L'uso razionale dell'energia* (14 pp.)
 - 124.d. *I mercati delle emissioni e dell'efficienza energetica in Italia* (8 pp.)
 - 124.e. *La costruzione energeticamente sostenibile: dalla Passivhaus+ai Green Tips+* (18 pp.)
 in L. Stefanutti (a cura di), *Manuale degli Impianti di Climatizzazione*+Milano, Tecniche Nuove, 2008, pp. 6-1 . 10-17 (ISBN 978-88-481-1884-2).
125. E. Fabrizio, *La valutazione della prestazione energetica delle costruzioni alpine isolate*, in F. Corrado, V. Porcellana (a cura di), *Alpi e ricerca. Proposte e progetti per i territori alpini*, Milano, Franco Angeli, 2010, pp. 193-202 (ISBN 978-88-568-3515-1).
126. B. Drusi, E. Fabrizio, A. Pellettieri, *Esperienze di certificazione Ecolabel per strutture ricettive in alta quota*, in F. Corrado, V. Porcellana (a cura di), *Alpi e ricerca. Proposte e progetti per i territori alpini*, Milano, Franco Angeli, 2010, pp. 203-215 (ISBN 978-88-568-3515-1).
127.
 - 127.a. M. Filippi, E. Fabrizio, *Introduzione*, pp. 1-2
 - 127.b. M. Filippi, E. Fabrizio, *Uno strumento per il progetto*, pp. 3-10
 - 127.c. E. Fabrizio, *Il software EnergyPlus*, pp. 49-68

- 127.d.M. Filippi, E. Fabrizio, *Premessa ai casi studio*, p. 91
- 127.e.E. Fabrizio, G. Regis, *Sistemi energetici nel residenziale*, pp. 151-164
- in M. Filippi, E. Fabrizio (a cura di), *Introduzione alla simulazione termoenergetica dinamica degli edifici*, Collana Guide AICARR, Editoriale Delfino, Milano, 2012 (ISBN 978-88-97323-14-3).
128. E. Canna, E. Fabrizio, P. Mellano, *Studi per l'ampiamento e la riqualificazione energetica del rifugio alpino in alta quota %Città di Vigevano+(Alagna Valsesia)*, in F. Corrado, E. Di Bella, V. Porcellana (a cura di), *Nuove frontiere della ricerca per i territori alpini+*, Milano, Franco Angeli, 2014, pp. 244-256 (ISBN 978-88-204-7908-4).
129. B. Drusì, E. Fabrizio, G. Airoldi, *Un manuale per la valorizzazione del paesaggio delle terre del Sesia*, in F. Corrado, E. Di Bella, V. Porcellana (a cura di), *Nuove frontiere della ricerca per i territori alpini+*, Milano, Franco Angeli, 2014, pp. 289-302 (ISBN 978-88-204-7908-4).

H) Proceedings of National Conferences

130. S.P. Cognati, R. Ansaldi, E. Fabrizio, *Eco-sostenibilità e comfort termoigometrico*, Convegno AICARR *%Gli impianti nell'edilizia eco-sostenibile e bio compatibile+*, Bologna 13 ottobre 2005, Torino 25 novembre 2005, Napoli 10 marzo 2006, pp. 153-163.
131. E. Fabrizio, J. Virgone, M. Filippi, S. Cognati, *Analyse multi paramètres d'un système solaire thermique pour chauffage et ECS d'une maison individuelle*, Relazione presentata alla Journée Maison Autonome, CEGELY Centre de Génie Electrique de Lyon, Ecully (Lyon), 6 luglio 2006.
132. S.P. Cognati, E. Fabrizio, M. Filippi, J. Virgone, *La valutazione del sistema multi-energia a servizio dell'edificio: un caso di studio*, 61° Congresso ATI, Perugia, 13-15 settembre 2006, vol. I, pp. 213-219 (ISBN 88-6074-048-7).
133. M. Filippi, S.P. Cognati, E. Fabrizio, *Riqualificazione impiantistica sostenibile: dal comfort adattativo ai sistemi multienergia*, Convegno AICARR *%b ciclo di vita degli impianti nell'ambito del processo edilizio+* (relazione a invito), Bologna 26 ottobre 2006, Torino 24 novembre 2006, Napoli 9 marzo 2007, pp. 89-103.
134. V. Corrado, E. Fabrizio, M. Filippi, J. Virgone, *La valutazione del sistema multi-energia a servizio dell'edificio: procedure di ottimizzazione e simulazione per un edificio monofamiliare*, 62° Congresso ATI, Fisciano (Salerno), 11-14 settembre 2007, vol. I, pp. 497-508 (ISBN 978-88-87998-77-1).
135. E. Fabrizio, M. Filippi, J. Virgone, *La valutazione del sistema multi-energia a servizio dell'edificio: procedura di simulazione dinamica attraverso la metodologia dell'energy hub*, 63° Congresso ATI *%nergia per lo sviluppo sostenibile+*, Palermo, 23-26 settembre 2008, pag. 02.010 (ISBN 978-88-7758-839-5).
136. R. Chiabrandi, E. Fabrizio, G. Garnero, *L'impatto territoriale e paesaggistico degli impianti fotovoltaici: stato dell'arte e applicazioni*, Congresso Nazionale AIIA [Associazione Italiana di Ingegneria Agraria] - R.U.R.A.L.I.A., Marina di Pisticci (MT), 17-19 settembre 2008.
137. V. Corrado, E. Fabrizio, *Il significato del fattore di utilizzazione nel calcolo semplificato del fabbisogno termico degli edifici: aspetti teorici e applicativi*, Convegno AICARR *%ertificazione energetica: normative e modelli di calcolo per il sistema edificio-impianto posti a confronto+*, Bologna 16 ottobre 2008, Torino 25 novembre 2008, Napoli 16 gennaio 2009, pag. 247-261 (ISBN 978-88-95620-24-4).
138. E. Fabrizio, M. Filippi, *L'energy hub: uno strumento di analisi per la valutazione di tecnologie impiantistiche integrate*, Seminario del Comitato Tecnico Refrigerazione dell'AICARR *%tecnologie integrate: nuova frontiera per il risparmio energetico+*, Padova, 14 novembre 2008, pp. 73-91 (ISBN 978-88-95620-27-5).
139. M. Filippi, E. Fabrizio, *Analisi di sistemi multienergia a servizio di edifici per la sanità*, Seminario del Comitato Tecnico Sanità dell'AICARR *%nergia negli ospedali. Problematiche e soluzioni di ottimizzazione delle risorse+*, Milano, 26 maggio 2009, pp. 79-97 (ISBN 978-88-95620-28-2).
140. E. Fabrizio, M. Filippi, *Sistema multienergia per un edificio a energia netta zero in clima alpino*, 64° Congresso ATI, L'Aquila - Montesilvano (PE), 8-11 settembre 2009, paper 4.15, pp. 1-8 (ISBN 978-88-87182-37-8).
141. R. Chiabrandi, E. Fabrizio, *La sostenibilità energetica delle costruzioni: criteri progettuali e strumenti di verifica*, IX Congresso Nazionale AIIA, Ischia Porto, 12-16 settembre 2009, paper 4-7, pp. 1-13 (ISBN 978-88-89972-13-7).
142. R. Chiabrandi, E. Fabrizio, G. Garnero, *La valutazione dell'impatto paesaggistico di impianti fotovoltaici al suolo: proposta metodologica ed esempio di applicazione*, IX Congresso Nazionale AIIA, Ischia Porto, 12-16 settembre 2009, paper 6-26, pp. 1-10 (ISBN 978-88-89972-13-7).
143. E. Fabrizio, G. Guerrisi, M. Perino, *Analisi di un componente di involucro a isolamento dinamico (Dynamic Insulation) in un edificio residenziale*, Bioedilizia Italia, Congresso Nazionale sull'Edilizia Sostenibile, Torino, 7-8 ottobre 2009 (ISBN 978-88-9044-970-3).
144. C. Becchio, D. Guglielmino, E. Fabrizio, *Metodologie di calcolo del fabbisogno di energia annuale per la climatizzazione: risultati a confronto*, Bioedilizia Italia, Congresso Nazionale sull'Edilizia Sostenibile, Torino, 7-8 ottobre 2009 (ISBN 978-88-9044-970-3).

145. E. Fabrizio, G. Regis, M. Torbino, M. Filippi, *Analisi di sistemi multienergia alimentati a biomassa a servizio di reti di teleriscaldamento*, 65° Congresso Nazionale ATI, Chia Laguna Resort . Domus De Maria (Cagliari), 13-17 settembre 2010, paper 05_360, pp. 1-8 (ISBN 978-88-90411-63-2).
146. E. Fabrizio, V. Branciforti, *Confronto tra asset rating e tailored rating nella riqualificazione energetica di una costruzione forestale in alta quota*, 65° Congresso Nazionale ATI, Chia Laguna Resort . Domus De Maria (Cagliari), 13-17 settembre 2010, paper 09_193, pp. 1-8 (ISBN 978-88-90411-63-2).
147. L. Battaglini, B. Drusi, E. Fabrizio, *Degree Course for the Alpine Space in Science and Culture in the Alpsq Landscape education and research in Piedmont for the implementation of the European Landscape Convention*, Turin, 16-17 october 2010, p. 15 (ISBN 978-88-95005-072).
148. E. Borgogno Mondino, R. Chiabrandi, E. Fabrizio, *Strumenti a supporto dell'individuazione delle aree idonee all'installazione di impianti fotovoltaici al suolo*, Convegno di medio termine dell'Associazione Italiana di Ingegneria Agraria %Gestione e controllo dei sistemi agrari e forestali+, Belgirate, 22-24 settembre 2011, paper B-16, pp. 1-9 (ISBN 978-88-906273-0-9).
149. E. Fabrizio, P. Gay, D. Ricauda Aimonino, *Modelling of steam storage vessels for batch processes in food plants*, Convegno di medio termine dell'Associazione Italiana di Ingegneria Agraria %Gestione e controllo dei sistemi agrari e forestali+, Belgirate, 22-24 settembre 2011, paper C-14, pp. 1-7 (ISBN 978-88-906273-0-9).
150. M. Filippi, E. Fabrizio, *Il concetto di Zero Energy Building*, Convegno AICARR %verso gli edifici a energia %quasi zero% le tecnologie disponibili+, Bologna 6 ottobre 2011, pp. 1-14 (ISBN 978-88-95620-10-7).
151. E. Fabrizio, M. Filippi, *Sistemi energetici integrati per l'edilizia residenziale*, Convegno AICARR %verso gli edifici a %energia quasi-zero% le tecnologie disponibili+, Bologna 6 ottobre 2011, pp. 69-89 (ISBN 978-88-95620-10-7); relazione ad invito.
152. S.P. Cognati, E. Fabrizio, M. Filippi, V. Monetti, *Livelli di prestazione energetica ottimali per edifici a energia quasi zero: creazione degli edifici di riferimento*, 67° Congresso Nazionale ATI, Trieste, 11-14 settembre 2012, paper 02.068, pp. 1-7 (ISBN 978-88-907676-0-9).
153. C. Becchio, E. Fabrizio, V. Monetti, *Livelli di prestazione energetica ottimali per edifici a energia quasi zero: il caso di un edificio multifamiliare*, 67° Congresso Nazionale ATI, Trieste, 11-14 settembre 2012, paper 02.100, pp. 1-9 (ISBN 978-88-907676-0-9).
154. E. Fabrizio, G. Aioldi, R. Chiabrandi, *Simulazione termoenergetica dinamica di un edificio per l'allevamento suinicolo: strategie edilizie e impiantistiche per l'ottimizzazione del benessere termoigrometrico*, in M. Barbari, F. Sorbetti Guerri (a cura di), %edilizia rurale tra sviluppo tecnologico e tutela del territorio. Convegno della II Sezione AIA Firenze, 20-22 settembre 2012+, Firenze University Press, Firenze, 2013, pp. 175-189 (ISBN 978-88-6655-394-6).
155. E. Fabrizio, G. Garnero, *Analisi di visibilità con tecniche GIS per la valutazione paesistica*, in M. Barbari, F. Sorbetti Guerri (a cura di), %edilizia rurale tra sviluppo tecnologico e tutela del territorio. Convegno della II Sezione AIA Firenze, 20-22 settembre 2012+, Firenze University Press, Firenze, 2013, pp. 403- 412 (ISBN 978-88-6655-394-6).
156. C. Becchio, P. Cantamessa, E. Fabrizio, P. Florio, V. Monetti, M. Filippi, *Smart schools: previsione dei risparmi energetici conseguibili*, Convegno AICARR %la gestione energetica del patrimonio edilizio pubblico: strategie ed esperienze+, Bologna 17 ottobre 2013.
157. M. Ferrara, J. Virgone, E. Fabrizio, F. Kuznik, M. Filippi, *Modélisation des bâtiments zéro-énergie : optimisation technico-économique*, Conférence IBPSA France 2014, Arras, 20-21 mai 2014.
158. E. Fabrizio, M. Filippi, V. Monetti, M. Magri, A. Magri, *Applicazione di un sistema di automazione per la termoregolazione e contabilizzazione del calore*, 33° Convegno Nazionale AICARR %comfort e risparmio energetico negli edifici esistenti: diagnosi, contabilizzazione, monitoraggio, building automation+, Bologna 15 ottobre 2015, pag. 285-298 (ISBN 978-88-95620-64-0).