

**PERSONAL INFORMATION**

Family name, First name: Goia, Francesco

Date of birth: 22.07.1983

Sex: Male

Nationality: Italian



Contacts: +47 45 02 74 37 (mobile);  
 +47 73595065 (office);  
[francesco.goia@ntnu.no](mailto:francesco.goia@ntnu.no) (professional e-mail)  
[francegoia@gmail.com](mailto:francegoia@gmail.com) (personal e-mail)

Researcher unique identifier(s) (such as ORCID, Research ID, etc):

<http://orcid.org/0000-0002-1886-4830><http://www.researcherid.com/rid/O-5871-2015>

Scopus Author ID: 7003855647

URL for personal web site: <https://www.ntnu.no/ansatte/francesco.goia>[https://www.researchgate.net/profile/Francesco\\_Goia](https://www.researchgate.net/profile/Francesco_Goia)

Francesco Goia is Associate Professor in Building Physics at the Faculty of Architecture and Design, Norwegian University of Science and Technology. He holds a Ph.D. in Energetics from the Polytechnic University of Turin and a co-joint Ph.D. in Architecture from the Norwegian University of Science and Technology.

Francesco is a passionate for technology and innovation and works to promote a more sustainable built environment. He was educated in the field of architectural engineering and architecture (B.Sc. cum laude, 2005; M.Sc. cum laude, 2008) at the Polytechnic University of Turin and Polytechnic University of Milan (joint M.Sc.), Italy. He also obtained the Diploma from the High Polytechnic School (Alta Scuola Politecnica) on Management of innovation projects in complex settings. Further specializations include a master in Materials for Energy and Environment (2010).

He has been working primarily at the Zero Emission Buildings Research Centre and at the Dept. of Energy of the Polytechnic University of Turin. Other work experiences prior and during the Ph.D. include consultant and research advisor for a façade engineering company and a research institute, instructor in building physics and building technology at the Polytechnic University of Turin, students supervision (B.Sc./M.Sc. level) for diploma thesis. As a postdoc, he was in charge of designing and implementing the building equipment, the monitoring and the control systems for two test buildings within the ZEB centre.

His main research activity concerns the ideation and assessment of strategies, technologies and systems for energy efficient buildings, with a focus on the dynamic behaviour and operation of building envelope components and integration of technologies and systems for renewable energy source harvesting. He is and has been involved in several experimental, laboratory and numerical/modelling activities aimed at assessing new technologies for responsive buildings, for solar energy and daylighting exploitation and for energy management in buildings.

The list of his technical and scientific expertise includes: thermal and energy analysis of buildings, energy management techniques and energy rating; environmental monitoring and building controls, thermal comfort and indoor air quality, systems and equipment for HVAC, lighting and solar energy exploitation; artificial light and daylight calculation and design; design of experiments and data analysis techniques, optical and thermo-physical properties characterization; mathematical modelling of physical and building physics phenomena; numerical simulations.

He is co-author of more than 50 publications, including research articles published in international, peer-reviewed journals; he has been and is an active member of different IEA Annex/Task groups and COST actions. He is a review for relevant peer-review scientific journals in the field of energy, environment and construction.

**CURRENT AND PREVIOUS POSITIONS**

2016-2017	Group Leader (Faggruppelider) Energy and Environment Faculty of Architecture and Design, Norwegian University of Science and Technology, Norway
2015-	Associate Professor Faculty of Architecture and Design, Norwegian University of Science and Technology, Norway
2014-2015	Post-Doctoral Research Fellow Faculty of Architecture and Design, Norwegian University of Science and Technology, Norway
2010-2013	PhD candidate ( <i>Joint PhD degree</i> ) Department of Energy, Polytechnic University of Turin, Italy <i>and</i> Faculty of Architecture and Design, Norwegian University of Science and Technology, Norway
2011-2012	Research Advisor / Internship (part time) SINTEF Building and Infrastructure, Norway

2009-2010      Researcher (Grant)  
 Department of Energy, Polytechnic University of Turin, Italy

## EDUCATION

2013      PhD (*Joint PhD degree*)  
 Department of Energy, Polytechnic University of Turin, Italy  
*and*  
 Faculty of Architecture and Design, Norwegian University of Science and Technology, Norway,  
 2010      Master in Materials for Energy and Environment  
 Faculty of Mathematics, Physics and Natural sciences, The University of Eastern Piedmont "Amedeo  
 Avogadro", Italy  
 2008      Diploma  
 Alta Scuola Politecnica, Italy  
 2008      MSc in Architecture (architecture and construction engineering class) (*Joint degree*)  
 Second Faculty of Architecture, Polytechnic University of Turin, Italy  
*and* Faculty of Architecture, Polytechnic University of Milan, Italy  
 2005      BSc in Architecture (architecture and architectural engineering class)  
 Second Faculty of Architecture, Polytechnic University of Turin, Italy

## FELLOWSHIPS AND AWARDS

2014-2015      Post-Doc fellowship within the Research Centre on Zero Emission Buildings, Faculty of Architecture  
 and Design, Norwegian University of Science and Technology, Norway  
 2011-2013      PhD fellowship within the Research Centre on Zero Emission Buildings, Faculty of Architecture and  
 Design, Norwegian University of Science and Technology, Norway  
 2010-2012      PhD fellowship from the Italian Ministry of Education, Universities and Research, Doctoral School,  
 Polytechnic University of Turin, Italy  
 2009-2010      Research grant from ISI Foundation – Institute for Scientific Interchange, Italy  
 2005-2008      Studentship (for MSc and Diploma) from Alta Scuola Politecnica, Italy  
 2006      Studentship (for Joint MSc degree with University of Belgrano, Argentina), Polytechnic University of  
 Turin, Italy – *turned down*  
 2004      Erasmus fellowship for student mobility to Polytechnic University of Catalonia, Spain, from Polytechnic  
 University of Turin, Italy

## MOBILITY

2010-2013      Joint PhD degree (2 years in Norway, 2 years in Italy)  
 Faculty of Architecture and Design, Norwegian University of Science and Technology, Norway  
*and* Department of Energy, Polytechnic University of Turin, Italy  
 2008      Master thesis at Façade research group, Delft University of Technology, The Netherlands  
 2004      Erasmus (one semester) at Polytechnic University of Catalonia, Spain

## SUPERVISION OF GRADUATE STUDENTS AND RESEARCH FELLOWS

2017-      1 Postdoc and 1 PhD (from August 2017)  
 2016-      1 Postdoc and 1 PhD  
 Faculty of Architecture and Design, Norwegian University of Science and Technology, Norway  
 2010-      15 Master Students/Bachelor students/Interns  
 Faculty of Architecture and Design, Norwegian University of Science and Technology, Norway  
*and* Department of Energy, Polytechnic University of Turin, Italy

## TEACHING ACTIVITIES

2016-      Lecturer – Integrated Energy Design, Faculty of Architecture and Design, Norwegian University of  
 Science and Technology, Norway  
 2015-      Lecturer and Course coordinator – Building physics and materials, Faculty of Architecture and  
 design, Norwegian University of Science and Technology, Norway  
 2012      Lecturer – Thermodynamics and Heat Transfer for Engineers, Faculty of Engineering, Polytechnic  
 University of Turin, Italy  
 2011      Lecturer – Concept and strategies in sustainable architecture, Faculty of Architecture and Design,  
 Norwegian University of Science and Technology, Norway

2010 Lecturer – Building physics, Faculty of Architecture, Polytechnic University of Turin, Italy  
 2008-2009 Lecturer – Technological culture in design, Faculty of Architecture, Polytechnic University of Turin, Italy

### INSTITUTIONAL RESPONSIBILITIES

2017 Member of the Department's steering group  
 Department of Architecture and Technology, Faculty of Architecture and Design, Norwegian University of Science and Technology  
 2016-2017 Leader (*faggruppeleder*) for the Group Energy & Environment  
 Faculty of Architecture and Design, Norwegian University of Science and Technology  
 2016- Academic coordinator for the mobility programme for doctoral students between NTNU and BUTE (Hungary)  
 Faculty of Architecture and Design, Norwegian University of Science and Technology  
 2014- Country representative and Member of the Core Action Group (steering committee) of COST Action TU 1403

### BIBLIOMETRIC INDICATORS

H-index 11 (source: SCOPUS) / 13 (source: Google Scholar).  
 Total citations 295 (source: SCOPUS) / 510 (source: Google Scholar)

### ACADEMIC HABILITATIONS

2016 Associate Professorship competence in Building and Construction Engineering (Sustainable and high performance buildings), Faculty of Engineering Science and Technology at the Norwegian University of Science and Technology, Norway.  
 2016 Associate Professorship competence in Building Physics and Materials, Faculty of Technology, Art and Design, Oslo and Akershus University College of Applied Science, Norway  
 2015 Associate Professorship competence in Building Physics, Faculty of Architecture and Design, Norwegian University of Science and Technology, Norway  
 2013 Venia Docendi at the Norwegian University of Science and Technology, Norway

### MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2013- Member of IBPSA-Nordic, the regional affiliate of IBPSA, the International Building Performance Simulation Association  
 2012- Member of the International Building Physics Association

### COMMISSIONS OF TRUST

2017 Scientific committee member of Ne – xt Facades – International Conference Building Envelope Design and Technology  
 2016- Expert registered at the European Commission for the field of Energy and Buildings.  
 2016- Scientific committee member of NSB2017 - 11<sup>th</sup> Nordic Symposium on Building Physics.  
 2015 Scientific advisor and reviewer for the Croatian Science Foundation  
 2013 Scientific advisor and reviewer for the Latvian Science Council  
 2010- Reviewer for several international conferences and for the following journals: Applied Energy, Building and Environment, Energy, Energy and Buildings, Energy Efficiency, Journal of Architectural Engineering, Journal of Building Engineering, Solar Energy, Sustainable Energy Technologies and Assessments

### RECENT PROJECTS AND INTERNATIONAL COLLABORATIONS

2017- NTNU Outstanding Research Fellows Programme, Participant, Personal budget: 0.8 MNOK  
 2017- REINVENT Project, Principal Investigator, Project manager, Total budget: 10.5 MNOK  
 2016- SKINTECH Project, WP Leader, Total budget: 9.2 MNOK  
 2016- IEA-SHC Task 56 "Building Integrated Solar Envelope Systems for HVAC and Lighting", Participant  
 2015- IEA-EBC Annex 67 "Energy Flexible Buildings", Participant and Action Leader  
 2014- COST Action TU1403 "Adaptive Façades Network", Country representative, Member of the Core Action Group (steering committee), WG co-chair.  
 2013-2015 ZEB Test Cells Laboratory, Task Leader, Total budget: (confidential)  
 2013-2015 ZEB Living Laboratory, Task Leader, Total budget: (confidential)

**CAREER BREAKS**

Career break of a 132 equivalent days in 2014 for paternity leave. Part of the career break was on a 50% part-time leave, and part on a 100% leave.

**LANGUAGE COMPETENCE**

Mother tongue(s) Italian

Other languages(s)

	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
<b>English</b>	C2	C2	C1	C1	C1
<b>Spanish</b>	B1	B1	B1	B1	B1
<b>French</b>	A1	A2	A1	A1	A1
<b>Hungarian</b>	A2	A1	A2	A1	A1
<b>Norwegian</b>	B2/C1	B2/C1	B2/C1	B2/C1	B2/C1

**SELECTED PEER-REVIEWED PUBLICATIONS** (full list available at: <http://orcid.org/0000-0002-1886-4830>)

- Giovannini, L., **Goia, F.**, Verso, VRML, Serra, V. *Energy Procedia* 111, pp. 357-366, 2017. DOI: 10.1016/j.egypro.2017.03.197
- H. Elarga, **F. Goia**, A. Zarrella, A. Dal Monte, E. Benini. *Solar Energy* 136, pp. 112-124, 2016. DOI: 10.1016/j.solener.2016.06.074
- G. Serale, **F. Goia**, M. Perino. *Solar Energy* 134, pp. 429-444, 2016. DOI: 10.1016/j.solener.2016.04.030
- F. Favoino, **F. Goia**, M. Perino, V. Serra. *Solar Energy* 133, pp. 226-248, 2016. DOI: 10.1016/j.solener.2016.03.031
- F. Goia**. *Solar Energy* 132, pp. 467-492, 2016. DOI: 10.1016/j.solener.2016.03.031
- F. Goia**, E. Boccaleri. *Energy and Buildings* 119 (9) pp. 41-50, 2016. DOI: 10.1016/j.enbuild.2016.03.007
- F. Goia**, M. Zinzi, E. Carnielo, V. Serra. *Energy and Buildings* 87 (1) pp. 302-312, 2015. DOI: 10.1016/j.enbuild.2014.11.019
- F. Goia**, B. Time, A. Gustavsen. *Energy Procedia* 78, pp. 2626-2631, 2015. DOI: 10.1016/j.egypro.2015.11.328
- L. Bianco, **F. Goia**, V. Serra, M. Zinzi. *Energy Procedia* 78, pp. 116-121, 2015. DOI: 10.1016/j.egypro.2015.11.124
- S. Grynning, **F. Goia**, B. Time. *Energy Procedia* 78, pp. 85-90, 2015. DOI: 10.1016/j.egypro.2015.11.119
- F. Goia**, M. Perino, V. Serra. *Solar Energy* 100 (2) pp. 217-233, 2014. DOI: 10.1016/j.solener.2013.12.002
- F. Goia**, Y. Cascone. *Energy Procedia* 58 pp. 185-192, 2014. DOI: 10.1016/j.egypro.2014.10.427
- F. Goia**, L. Bianco, Y. Cascone, V. Serra, M. Perino. *Energy Procedia* 48 pp. 1272-1281, 2014. DOI: 10.1016/j.egypro.2014.02.144
- G. Serale, S. Baronetto, **F. Goia**, M. Perino. *Energy Procedia* 48 pp. 223-232, 2014. DOI: 10.1016/j.egypro.2014.02.027
- F. Goia**, L. Bianco, M. Perino, V. Serra. *Energy Procedia* 48 pp. 1262 - 1271, 2014. DOI: 10.1016/j.egypro.2014.02.143
- S. Baronetto, G. Serale, **F. Goia**, M. Perino. *Lecture Notes in Electrical Engineering* 263 (3) pp. 13-20, 2014. DOI: 10.1007/978-3-642-39578-9\_2
- F. Goia**, L. Bianco, V. Serra, M. Perino. *Lecture Notes in Electrical Engineering* 263 (3) pp. 21-28, 2014. DOI: 10.1007/978-3-642-39578-9\_3
- F. Favoino, **F. Goia**, M. Perino, V. Serra. *Energy and Buildings* 68, Part B (1) pp. 647-659, 2014. DOI: 10.1016/j.enbuild.2013.08.066
- S. Grynning, **F. Goia**, E. Rognvik, B. Time. *Journal of Sustainable Built Environment* 2 (1) pp 56-64, 2013. DOI: 10.1016/j.jsbe.2013.09.003
- F. Goia**, M. Haase, M. Perino. *Applied Energy* 108 (8) pp. 515-527, 2013. DOI: 10.1016/j.apenergy.2013.02.063
- F. Goia**, M. Perino, V. Serra. *Energy and Buildings* 60 (5) pp. 442-452, 2013. DOI: 10.1016/j.enbuild.2013.01.029
- F. Goia**. *Frontiers of Architectural Research* 1 (4) pp. 341-347, 2012. DOI: 10.1016/j.foar.2012.10.002.
- F. Goia**, M. Perino, M. Haase. *Energy and Buildings* 54 (11) pp. 141-153, 2012. DOI: 10.1016/j.enbuild.2012.07.036
- F. Goia**, M. Zinzi, E. Carnielo, V. Serra. *Energy Procedia* 30 pp. 428-437, 2012. DOI: 10.1016/j.egypro.2012.11.051
- F. Goia**, M. Perino, V. Serra, F. Zanghirella. *Journal of Green Building* 5 (4) pp. 121-136, 2010. DOI: 10.3992/jgb.5.4.121