

Michele Rocca

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Personal information

Date of birth **22.03.1983**
Place of birth La Spezia (SP), Italy
Addresses 1, Via Venezia Giulia, 56124, Pisa (PI), Italy
Nationality Italian
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Education

2017-2020	University of Pisa – PhD in Energy Systems Territory and Construction Engineering (XXXII cycle) Thesis title: “Indoor Environmental Quality assessment: study of innovative strategies based on multi-criteria analysis”.
2019	Italian Building physics Association – Summer School in New frontiers in heat transfer
2015	Politecnico di Torino - International Association of Building Physics (IABP) Summer School in “Building Physics in Urban Environments”.
2010-2013	University of Pisa - Master degree in Building Engineering Thesis title: “Visual ergonomics and visual comfort in indoor workplaces: Analysis of Video Display Terminal (VDT) Workstations: the CAD workstation” (in Italian)
2002-2010	University of Pisa - Bachelor Degree in Building Engineering Thesis Title: “Acoustic analysis at the nursery school G. Puccini in Pisa: Acoustic insulation of building structures, Acoustic classification, Environmental noise measurements” (in Italian).

Academic Experience

2023→	University of Pisa – Fixed-term Researcher (Article 24, paragraph 3, letter a) of law 240/2010) at the Department of Energy, Systems, Territory and Construction Engineering, GSD: 09/IIND-07 (ex 09/C2), SSD: IIND-07/A (ex ING-IND/10) Thermal engineering and industrial energy systems.
2021-2022	Sapienza University of Rome – Research grant on “Monitoring of personal exposure of outdoor workers to solar UV radiation” (Duration: 1 year) within the BRIC INAIL 8/2019 Project, awarded through public selection and conferred with Prot. Nr. 759/2022.
2020-2021	University of Pisa – Research grant on “Identification and quantification of on-board noise sources and transmission paths” (Duration: 1 year) within the TRIM Technology and Industrial Research for Marine Mobility Project, awarded through public selection and conferred with Prot. Nr. 20888/2021 of 02/25/2021.

2020	University of Pisa – Research fellowship on “Smart Systems for innovative strategies of IEQ assessment” (Duration: 6 months) within the “PRA2018 Smart Energy Systems” Project; CUP. I56C18000710005 (Supervisor: Prof. F. Leccese).
2016	University of Pisa – Research fellowship on “Energy Diagnosis and renovation of a secondary school” (Duration: 6 months) within the “ENEA 2015” Project (Supervisor: Prof. D. Testi).
2014-2015	University of Pisa – Research fellowship on “Field measurements with Department instruments and calculus/simulation activities with lighting simulation software” (Duration: 8 months) within the Research Contract with the company LGI srl. (Supervisor: Prof. F. Leccese).
	<p>Editorial Board Member for the journals:</p> <ul style="list-style-type: none"> - Journal of Daylighting (ISSN: 2383-8701) publisher: Solarlits. (Scopus ID: 21100857954). - Architecture and Engineering (ISSN: 2500-0055) publisher: Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia. (Scopus ID: 21100972429). <p>Reviewer Board Member for the journals: <i>Buildings, Energies, Sustainability, Environment, Encyclopaedia, International Journal of Environmental Research and Public Health, Applied Sciences, Frontiers in Built Environment.</i></p> <p>Reviewer for the journals: <i>Building and Environment, Energy and Built Environment, Frontiers in Built Environment, Work Journal of Prevention, International Journal of Occupational Safety and Ergonomics, Displays, Data in Brief, MethodX.</i></p>

Teaching

2023-2024	<p>University of Pisa</p> <ul style="list-style-type: none"> - Head of Teaching of the course “Elementi di Fisica Tecnica ed Impianti” (6 CFU) of the Degree Course in “Tecniche per le Costruzioni Civili e la Gestione del Territorio”. - Co-teaching assignment for the course “Metodi per la sostenibilità energetica” (6 CFU) of the Bachelor Degree Course in Energy Engineering (Head of teaching: Prof. A. Franco). - Co-teaching assignment for the course “Energia” (6 CFU) of the Degree Course in “Tecniche per la Meccanica e la Produzione” (Head of teaching: Prof. A. Franco)
2023	<p>University of Pisa – Second Level University Master (Post-Degree Course) in “Comunità Energetiche Sostenibili - CERS”</p> <p>Lecture on “Comfort condition in Indoor Environments” (2 hours).</p>
2014	<p>University of Pisa – Second Level University Master (Post-Degree Course) in “Innovative solution for building engineering”</p> <p>Lecture on “Innovative lighting and Acoustics Solutions” (8 hours).</p>
2012-2013	<p>University of Pisa – Role of support for university teaching activities</p> <p>Course of “Lighting and Applied Acoustics” in the Master Degree Course in Building Engineering.</p>

Scientific publications

Bibliometric indicators (at 07 January 2025, Source: SCOPUS):

H index 15

Citations: 588

List of publications (selected)

- [1] Franco A., **Rocca M. Industrial Decarbonization through Blended Combustion of Natural Gas and Hydrogen.** *Hydrogen* 2024, Vol 5(3), pp. 519-539. doi: 10.3390/hydrogen5030029
- [2] Franco A., **Rocca M. Renewable Electricity and Green Hydrogen Integration for Decarbonization of “Hard-to-Abate” Industrial Sectors.** *Electricity* 2024, Vol. 5(3), pp. 471-490. doi: 10.3390/electricity5030024
- [3] Leccese F., **Rocca M.**, Salvadori G., Belloni E., Buratti C. **A multicriteria method to identify and rank IEQ criticalities: Measurements and applications for existing schools building.** *Energy and Built Environment* 2024 [Article in press]. doi: 10.1016/j.enbenv.2023.12.004
- [4] **Rocca M.**, Di Puccio F., Forte P., Leccese F. **Acoustic comfort requirements and classifications: Buildings vs. yachts.** *Ocean Engineering*, 2022, Vol. 255, art. nr. 111374. doi:10.1016/j.oceaneng.2022.111374
- [5] Leccese F., **Rocca M.**, Salvadori G., Belloni E., Buratti C. **Towards a holistic approach to indoor environmental quality assessment: Weighting schemes to combine effects of multiple environmental factors.** *Energy and Buildings*, 2021, Vol. 245, Article nr. 11056. doi: 10.1016/j.enbuild.2021.111056
- [6] Leccese F. Salvadori G., **Rocca M.**, Buratti C., Belloni E. **A method to assess lighting quality in educational rooms using analytic hierarchy process.** *Building and Environment*, 2020, Vol. 168, Article nr 106501. doi:10.1016/j.buildenv.2019.106501
- [7] Fantozzi F., Rocca M. **An Extensive Collection of Evaluation Indicators to Assess Occupants’ Health and Comfort in Indoor Environment.** *Atmosphere*, 2020, Vol.11 (1), Article nr. 90. doi: 10.3390/atmos11010090.
- [8] Fantozzi F., Hamdi H., **Rocca M.**, Vegnuti S. **Use of automated control systems and advanced energy simulations in the design of climate responsive educational building for Mediterranean area.** *Sustainability*, 2019, Vol. 11(6). doi:10.3390/su11061660.
- [9] Leccese F., **Rocca M.**, Salvadori G. **Fast estimation of Speech Transmission Index using the Reverberation Time: Comparison between predictive equations for educational rooms of different sizes.** *Applied Acoustics*, 2018, Vol. 140, pp. 143-149. doi: 10.1016/j.apacoust.2018.05.019.
- [10] Leccese F., **Rocca M.**, Salvadori G. **Critical Analysis of the Energy Performance Indicators for Road Lighting Systems in Historical Towns of Central Italy.** *Energy*, 2017, Vol. 138, pp. 616-628. doi:10.1016/j.energy.2017.07.093.
- [11] Leccese F., Salvadori G., Montagnani C., Ciconi A., **Rocca M.** **Lighting assessment of ergonomic workstation for radio diagnostic reporting.** *International Journal of Industrial Ergonomics*, 2017, Vol.57, pp.42-54. doi: 10.1016/j.ergon.2016.11.005.
- [12] Salvadori G., Fantozzi F., **Rocca M.**, Leccese F. **The energy audit activity focused on the lighting systems in historical buildings.** *Energies*, 2016, Vol. 9(12), pp. 998-1010, doi: 10.3390/en9120998.
- [13] Leccese F., Tuoni G., Salvadori G., **Rocca M.** **An analytical model to evaluate the cocktail party effect in restaurant dining room: a case study.** *Applied Acoustic*, December 2015, Vol.100, pp.87-94, doi: 10.1016/j.apacoust.2015.06.012.
- [14] Leccese F., Vandelanotte V., Salvadori G., **Rocca M.** **Blue Light Hazard and Risk Group Classification of 8W LED tubes, replacing fluorescent tubes, through optical radiation measurements.** *Sustainability*, September 2015, Vol.7(10), pp.13454-13468, doi: 10.3390/su71013454
- [15] Fantozzi F., Galbiati P., Leccese F., Salvadori G., **Rocca M.** **Thermal analysis of the building envelope of lightweight temporary housing.** *Journal of Physics: Conference Series.*, Vol. 547 (2014). doi: 10.1088/1742-6596/547/1/012011.

Pisa, 07/01/2025

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