Francesco Asdrubali

List of Publications by Year
in descending order

130 papers	6,431 citations	71102 41 h-index	71685 76 g-index
141 all docs	141 docs citations	141 times ranked	5945 citing authors

#	Article	IF	Citations
1	On the equivalent thermo-physical properties for modeling building walls with unknown stratigraphy. Energy, 2022, 238, 121679.	8.8	3
2	On the ageing and weathering effects in assembled modular facades: On-site experimental measurements in an Italian building of the 1960s. Journal of Building Engineering, 2022, 45, 103519.	3.4	5
3	A Round Robin Test on the dynamic simulation and the LEED protocol evaluation of a green building. Sustainable Cities and Society, 2022, 78, 103654.	10.4	3
4	On the influence of environmental boundary conditions on surface thermal resistance of walls: Experimental evaluation through a Guarded Hot Box. Case Studies in Thermal Engineering, 2022, 34, 101915.	5.7	6
5	Life cycle assessment of geothermal power plants: A comparison with other energy conversion technologies. Geothermics, 2022, 104, 102434.	3.4	18
6	How Do Temperature Differences and Stable Thermal Conditions Affect the Heat Flux Meter (HFM) Measurements of Walls? Laboratory Experimental Analysis. Energies, 2022, 15, 4746.	3.1	0
7	Assessment of acoustic metawindow unit through psychoacoustic analysis and human perception. Applied Acoustics, 2022, 196, 108885.	3.3	6
8	Noise Mapping Special Issue: The noise climate at the time of SARS-CoV-2 Virus/COVID-19 Disease. Noise Mapping, 2021, 8, 204-206.	1.8	3
9	On the Retrofit of Existing Buildings with Aerogel Panels: Energy, Environmental and Economic Issues. Energies, 2021, 14, 1276.	3.1	11
10	Mathematical models for the improvement of detection techniques of industrial noise sources from acoustic images. Mathematical Methods in the Applied Sciences, 2021, 44, 10448-10459.	2.3	5
11	Embodied Energy and Embodied GWP of Windows: A Critical Review. Energies, 2021, 14, 3788.	3.1	14
12	Embodied energy and carbon of building insulating materials: A critical review. Cleaner Environmental Systems, 2021, 2, 100032.	4.2	41
13	Smart Materials: Cementitious Mortars and PCM Mechanical and Thermal Characterization. Materials, 2021, 14, 4163.	2.9	3
14	An Evaluation of the Environmental Payback Times and Economic Convenience in an Energy Requalification of a School. Buildings, 2021, 11, 12.	3.1	13
15	Influence of environmental boundary conditions on convective heat transfer coefficients of wall internal surface. E3S Web of Conferences, 2021, 312, 02012.	0.5	0
16	Dynamic life cycle assessment modelling of a NZEB building. Energy, 2020, 191, 116489.	8.8	58
17	An experimental investigation of the thermal performance of a building solar shading device. Journal of Building Engineering, 2020, 28, 101089.	3.4	28
18	Urban Heat Island Mitigation Strategies: Experimental and Numerical Analysis of a University Campus in Rome (Italy). Sustainability, 2020, 12, 7971.	3.2	20

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19	Neighbourhood sustainability: State of the art, critical review and space-temporal analysis. Sustainable Cities and Society, 2020, 63, 102477.	10.4	26
20	A methodological approach for heat-flow meter data post-processing under different climatic conditions and wall orientations. Energy and Buildings, 2020, 223, 110216.	6.7	16
21	Experimental Evaluation and Numerical Simulation of the Thermal Performance of a Green Roof. Applied Sciences (Switzerland), 2020, 10, 1767.	2.5	14
22	On the Energy Performance of an Innovative Green Roof in the Mediterranean Climate. Energies, 2020, 13, 5163.	3.1	13
23	Recent Editorial policy for Building Acoustics: a first balance and future perspectives. Building Acoustics, 2020, 27, 81-82.	1.9	0
24	In situ thermal characterization of existing buildings aiming at NZEB standard: A methodological approach. Developments in the Built Environment, 2020, 2, 100008.	4.0	7
25	Life cycle energy minimization of autonomous buildings. Journal of Building Engineering, 2020, 30, 101229.	3.4	16
26	The Effect of a LED Lighting Crosswalk on Pedestrian Safety: Some Experimental Results. Safety, 2020, 6, 20.	1.7	24
27	Aerogel insulation in building energy retrofit. Performance testing and cost analysis on a case study in Rome. Energy Reports, 2020, 6, 56-61.	5.1	15
28	Life cycle assessment of energy efficient buildings. Energy Reports, 2020, 6, 270-285.	5.1	18
29	Energy and carbon footprint assessment of production of hemp hurds for application in buildings. Environmental Impact Assessment Review, 2020, 84, 106417.	9.2	40
30	Noise Mapping: a first balance and future perspectives. Noise Mapping, 2020, 7, 84-86.	1.8	1
31	Latest advances on solar thermal collectors: A comprehensive review. Renewable and Sustainable Energy Reviews, 2019, 114, 109318.	16.4	161
32	Traffic Simulation-Based Approach for A Cradle-to-Grave Greenhouse Gases Emission Model. Sustainability, 2019, 11, 4328.	3.2	9
33	Real time UV erythemal personal exposure monitoring in outdoor workplaces. , 2019, , .		4
34	Carbon Footprint of autonomous vehicles at the urban mobility system level: A traffic simulation-based approach. Transportation Research, Part D: Transport and Environment, 2019, 74, 189-200.	6.8	40
35	Exploring the compatibility of â€œMethod Aâ€•and â€œMethod Bâ€•data collection protocols reported in the ISO/TS 12913-2:2018 for urban soundscape via a soundwalk. Applied Acoustics, 2019, 155, 190-203.	3.3	44
36	Thermal conductivity measurement of insulating innovative building materials by hot plate and heat flow meter devices: A Round Robin Test. International Journal of Thermal Sciences, 2019, 139, 25-35.	4.9	36

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37	Influence of LCA procedure on the green building rating tools outcomes. IOP Conference Series: Materials Science and Engineering, 2019, 609, 072044.	0.6	3
38	Green roof for zero energy buildings: a pilot project. IOP Conference Series: Materials Science and Engineering, 2019, 609, 072011.	0.6	2
39	Comparison between heat-flow meter and Air-Surface Temperature Ratio techniques for assembled panels thermal characterization. Energy and Buildings, 2019, 203, 109441.	6.7	17
40	Energy and environmental payback times for an NZEB retrofit. Building and Environment, 2019, 147, 461-472.	6.9	84
41	On the sky temperature models and their influence on buildings energy performance: A critical review. Energy and Buildings, 2019, 183, 607-625.	6.7	73
42	Eco-materials with Noise Reduction Properties. , 2019, , 3031-3056.		10
43	Influence of heating systems on thermal transmittance evaluations: Simulations, experimental measurements and data post-processing. Energy and Buildings, 2018, 168, 180-190.	6.7	37
44	Innovative Approaches for Noise Management in Smart Cities: a Review. Current Pollution Reports, 2018, 4, 143-153.	6.6	28
45	Bio-based and recycled-waste materials in buildings: A study of energy performance of hemp-lime concrete and recycled-polyethylene terephthalate faÃ§ades for office facilities in France and Italy. Science and Technology for the Built Environment, 2018, 24, 492-501.	1.7	20
46	A model for the improvement of thermal bridges quantitative assessment by infrared thermography. Applied Energy, 2018, 211, 854-864.	10.1	65
47	An energy and carbon footprint assessment upon the usage of hemp-lime concrete and recycled-PET faÃ§ades for office facilities in France and Italy. Journal of Cleaner Production, 2018, 170, 1640-1653.	9.3	54
48	Energy and exergy analysis of glycerol combustion in an innovative flameless power plant. Journal of Cleaner Production, 2018, 172, 3817-3824.	9.3	28
49	Batch pyrolysis of pellet made of biomass and crude glycerol: Mass and energy balances. Renewable Energy, 2018, 124, 172-179.	8.9	43
50	Critical review and methodological approach to evaluate the differences among international green building rating tools. Renewable and Sustainable Energy Reviews, 2018, 82, 950-960.	16.4	202
51	Detection of thermal bridges from thermographic images by means of image processing approximation algorithms. Applied Mathematics and Computation, 2018, 317, 160-171.	2.2	64
52	Assessment of equivalent thermal properties of multilayer building walls coupling simulations and experimental measurements. Building and Environment, 2018, 127, 77-85.	6.9	20
53	Prevention of UV Radiation Hazard. , 2018, , .		5
54	Evaluation of the Energy and Environmental Payback Time for a NZEB Building. , 2018, , .		2

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55	Passive thermal behaviour of buildings: Performance of external multi-layered walls and influence of internal walls. Applied Energy, 2018, 225, 1078-1089.	10.1	54
56	Environmental performance of universities: Proposal for implementing campus urban morphology as an evaluation parameter in Green Metric. Sustainable Cities and Society, 2018, 42, 226-239.	10.4	29
57	Energy Benchmarking in Educational Buildings through Cluster Analysis of Energy Retrofitting. Energies, 2018, 11, 649.	3.1	33
58	Eco-Materials with Noise Reduction Properties. , 2018, , 1-26.		7
59	Development of Electric Urban Mobility: Comparative Research and Preliminary Survey. European Journal of Sustainable Development Research, 2018, 2, 32.	0.9	8
60	How reproducible is the acoustical characterization of porous media?. Journal of the Acoustical Society of America, 2017, 141, 945-955.	1.1	30
61	New challenges in Building Acoustics. Building Acoustics, 2017, 24, 3-4.	1.9	2
62	A review of structural, thermo-physical, acoustical, and environmental properties of wooden materials for building applications. Building and Environment, 2017, 114, 307-332.	6.9	187
63	Influence of internal heat sources on thermal resistance evaluation through the heat flow meter method. Energy and Buildings, 2017, 135, 187-200.	6.7	32
64	Multipurpose experimental characterization of smart nanocomposite cement-based materials for thermal-energy efficiency and strain-sensing capability. Solar Energy Materials and Solar Cells, 2017, 161, 77-88.	6.2	75
65	Quantifying the effects of interior surface reflectance on indoor lighting. Energy Procedia, 2017, 134, 306-316.	1.8	18
66	A Note on Medium- and Long-Term Global Energy Prospects and Scenarios. Sustainability, 2017, 9, 833.	3.2	10
67	Recent Trends in the World Gas Market: Economical, Geopolitical and Environmental Aspects. Sustainability, 2016, 8, 154.	3.2	29
68	Influence of Insulating Materials on Green Building Rating System Results. Energies, 2016, 9, 712.	3.1	34
69	Sustainable Acoustic Metasurfaces for Sound Control. Sustainability, 2016, 8, 107.	3.2	10
70	Water and Carbon Footprint of Wine: Methodology Review and Application to a Case Study. Sustainability, 2016, 8, 621.	3.2	55
71	Insulation materials for the building sector: A review and comparative analysis. Renewable and Sustainable Energy Reviews, 2016, 62, 988-1011.	16.4	615
72	An experimental setup for the analysis of an energy recovery system from wastewater for heat pumps in civil buildings. Applied Thermal Engineering, 2016, 102, 961-971.	6.0	34

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73	Experimental thermo-acoustic characterization of innovative common reed bio-based panels for building envelope. Building and Environment, 2016, 102, 217-229.	6.9	42
74	Environmental impact of an Italian wine bottle: Carbon and water footprint assessment. Science of the Total Environment, 2016, 560-561, 274-283.	8.0	90
75	Self-sensing and thermal energy experimental characterization of multifunctional cement-matrix composites with carbon nano-inclusions. , 2016, , .		8
76	Experimental investigation of the influence of convective and radiative heat transfers on thermal transmittance measurements. International Communications in Heat and Mass Transfer, 2016, 78, 214-223.	5.6	30
77	Design criteria for improving insulation effectiveness of multilayer walls. International Journal of Heat and Mass Transfer, 2016, 103, 349-359.	4.8	31
78	Thermal and lighting effects of an external venetian blind: Experimental analysis in a full scale test room. Building and Environment, 2016, 106, 45-56.	6.9	47
79	Energy and emissions analysis of next generation electrochromic devices. Solar Energy Materials and Solar Cells, 2016, 156, 170-181.	6.2	20
80	A comparative Life Cycle Assessment of external wall-compositions for cleaner construction solutions in buildings. Journal of Cleaner Production, 2016, 124, 283-298.	9.3	81
81	Experimental and environmental analysis of new sound-absorbing and insulating elements in recycled cardboard. Journal of Building Engineering, 2016, 5, 1-12.	3.4	46
82	Experimental and numerical characterization of innovative cardboard based panels: Thermal and acoustic performance analysis and life cycle assessment. Building and Environment, 2016, 95, 145-159.	6.9	61
83	Thermal and optical characterization of natural and artificial marble for roof and external floor installations. Journal of Physics: Conference Series, 2015, 655, 012017.	0.4	1
84	Energy Performance Database of Building Heritage in the Region of Umbria, Central Italy. Energies, 2015, 8, 7261-7278.	3.1	15
85	The Water Footprint of the Wine Industry: Implementation of an Assessment Methodology and Application to a Case Study. Sustainability, 2015, 7, 12190-12208.	3.2	51
86	Experimental Performance Analyses of a Heat Recovery System for Mechanical Ventilation in Buildings. Energy Procedia, 2015, 82, 465-471.	1.8	8
87	Innovative Cardboard Based Panels with Recycled Materials from the Packaging Industry: Thermal and Acoustic Performance Analysis. Energy Procedia, 2015, 78, 321-326.	1.8	36
88	A comparison between environmental sustainability rating systems LEED and ITACA for residential buildings. Building and Environment, 2015, 86, 98-108.	6.9	100
89	Experimental evaluation and modelling of the sound absorption properties of plants for indoor acoustic applications. Building and Environment, 2015, 94, 913-923.	6.9	40
90	A review of unconventional sustainable building insulation materials. Sustainable Materials and Technologies, 2015, 4, 1-17.	3.3	483

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91	Life Cycle Assessment of New Oxy-Fuels from Biodiesel-Derived Glycerol. Energies, 2015, 8, 1628-1643.	3.1	19
92	Life cycle assessment of electricity production from renewable energies: Review and results harmonization. Renewable and Sustainable Energy Reviews, 2015, 42, 1113-1122.	16.4	240
93	Simulation of Daylighting Conditions in a Virtual Underground City. Journal of Daylighting, 2015, 2, 1-11.	1.2	8
94	Infrared Thermography Assessment of Thermal Bridges in Building Envelope: Experimental Validation in a Test Room Setup. Sustainability, 2014, 6, 7107-7120.	3.2	62
95	Sun Simulators: Development of an Innovative Low Cost Film Filter. Sustainability, 2014, 6, 6830-6846.	3.2	11
96	New frontiers in environmental noise research. Noise Mapping, 2014, 1, .	1.8	8
97	Human-based energy retrofits in residential buildings: A cost-effective alternative to traditional physical strategies. Applied Energy, 2014, 133, 224-235.	10.1	91
98	Multi-parametric characterization of a sustainable lightweight concrete containing polymers derived from electric wires. Construction and Building Materials, 2014, 68, 277-284.	7.2	37
99	Numerical Modeling of Atmospheric Water Content and Probability Evaluation. Part I. Procedia Engineering, 2014, 70, 321-329.	1.2	1
100	Numerical Modeling of Atmospheric Water Content and Probability Evaluation. Part II. Procedia Engineering, 2014, 70, 330-338.	1.2	1
101	Energy and environmental performance optimization of a wooden window: A holistic approach. Energy and Buildings, 2014, 79, 114-131.	6.7	51
102	Evaluating in situ thermal transmittance of green buildings masonriesâ€"A case study. Case Studies in Construction Materials, 2014, 1, 53-59.	1.7	99
103	The Noise Abatement Plan of an Italian Road Network: A Comparison Between Standard and Innovative Methodologies. Open Transportation Journal, 2014, 8, 26-38.	0.6	9
104	Influence of new fac tors on global energy prospects in the medium term: compar ison among the 2010, 2011 and 2012 editions of the IEA's World Energy Outlook reports. Economics and Policy of Energy and the Environment, 2014, , 67-89.	0.2	6
105	Life cycle analysis in the construction sector: Guiding the optimization of conventional Italian buildings. Energy and Buildings, 2013, 64, 73-89.	6.7	258
106	Development of a greenhouse gas accounting GIS-based tool to support local policy makingâ€"application to an Italian municipality. Energy Policy, 2013, 61, 587-594.	8.8	39
107	Technologies for energetic exploitation of biodiesel chain derived glycerol: Oxy-fuels production by catalytic conversion. Applied Energy, 2013, 102, 63-71.	10.1	72
108	Influence of cavities geometric and emissivity properties on the overall thermal performance of aluminum frames for windows. Energy and Buildings, 2013, 60, 298-309.	6.7	32

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109	Evaluation of Green Buildingsâ€™ Overall Performance through in Situ Monitoring and Simulations. Energies, 2013, 6, 6525-6547.	3.1	45
110	The perceived quality of soundscape in three urban parks in Rome. Journal of the Acoustical Society of America, 2013, 134, 832-839.	1.1	78
111	Assessment of the Performance of Road Markings in Urban Areas: The Outcomes of the CIVITAS RENAISSANCE Project. Open Transportation Journal, 2013, 7, 7-19.	0.6	9
112	Evaluation of Net Energy Obtainable from Combustion of Stabilised Olive Mill By-Products. Energies, 2012, 5, 1384-1397.	3.1	27
113	On the Evaluation of Solar Greenhouse Efficiency in Building Simulation during the Heating Period. Energies, 2012, 5, 1864-1880.	3.1	54
114	Towards life cycle sustainability assessment: an implementation to photovoltaic modules. International Journal of Life Cycle Assessment, 2012, 17, 1068-1079.	4.7	143
115	A Review of Sustainable Materials for Acoustic Applications. Building Acoustics, 2012, 19, 283-311.	1.9	272
116	A quantitative methodology to evaluate thermal bridges in buildings. Applied Energy, 2012, 97, 365-373.	10.1	173
117	METHOD FOR RAPID ON-SITE IDENTIFICATION OF VOCs IN EWE MILK. Italian Journal of Food Safety, 2011, 1, 97.	0.8	0
118	Thermal transmittance measurements with the hot box method: Calibration, experimental procedures, and uncertainty analyses of three different approaches. Energy and Buildings, 2011, 43, 1618-1626.	6.7	132
119	Impact Sound Insulation and Viscoelastic Properties of Resilient Materials made from Recycled Tyre Granules. International Journal of Acoustics and Vibrations, 2011, 16, .	0.3	8
120	Theoretical modelling and experimental evaluation of the optical properties of glazing systems with selective films. Building Simulation, 2009, 2, 75-84.	5.6	32
121	A scale model to evaluate water evaporation from indoor swimming pools. Energy and Buildings, 2009, 41, 311-319.	6.7	55
122	Comparative study of energy regulations for buildings in Italy and Spain. Energy and Buildings, 2008, 40, 1805-1815.	6.7	64
123	Reflecting panels for radiators in residential buildings: Theoretical analysis of energy performance. , 2008, , .		1
124	Reproducibility experiments on measuring acoustical properties of rigid-frame porous media (round-robin tests). Journal of the Acoustical Society of America, 2007, 122, 345-353.	1.1	53
125	Acoustic Performances of High Insulation Ventilating Windows Integrated with Rolling Shutter Boxes. Noise and Vibration Worldwide, 2007, 38, 21-28.	1.0	0
126	Properties of transparent sound-absorbing panels for use in noise barriers. Journal of the Acoustical Society of America, 2007, 121, 214-221.	1.1	98

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127	Sound intensity investigation of the acoustics performances of high insulation ventilating windows integrated with rolling shutter boxes. Applied Acoustics, 2005, 66, 1088-1101.	3.3	21
128	Experimental evaluation of the performances of a H2Oâ€“LiBr absorption refrigerator under different service conditions. International Journal of Refrigeration, 2005, 28, 489-497.	3.4	66
129	Transmission loss measurement of consolidated granular media (L). Journal of the Acoustical Society of America, 2005, 117, 2716-2719.	1.1	32
130	The Acoustic Properties of Expanded Clay Granulates. Building Acoustics, 2002, 9, 85-98.	1.9	34