Massimo Garai

List of Publications by Year
in descending order

57 papers	940 citations	623734 14 h-index	501196 28 g-index
59 all docs	59 docs citations	59 times ranked	753 citing authors

#	Article	IF	Citations
1	Determination of the dispersion relation in cross-laminated timber plates: Benchmarking of time- and frequency-domain methods. Applied Acoustics, 2022, 185, 108400.	3.3	3
2	Measuring and modelling the effect of base zone on sound absorption of persian rug. Journal of the Textile Institute, 2022, 113, 2778-2786.	1.9	2
3	Measuring and modeling the effect of density and pile height on sound absorption of double base Persian rug. Journal of Industrial Textiles, 2022, 51, 5728S-5755S.	2.4	1
4	Influence of thermal deformations on sound absorption of three-dimensional printed metamaterials. Journal of the Acoustical Society of America, 2022, 151, 3770-3779.	1.1	8
5	A Trial Acoustic Improvement in a Lecture Hall with MPP Sound Absorbers and FDTD Acoustic Simulations. Applied Sciences (Switzerland), 2021, 11, 2445.	2.5	13
6	Unsupervised analysis of background noise sources in active offices. Journal of the Acoustical Society of America, 2021, 149, 4049-4060.	1.1	12
7	A newly developed low-cost 3D acoustic positioning system: Description and application in a reverberation room. Applied Acoustics, 2020, 160, 107127.	3.3	1
8	Preparation and assessment of the potential energy savings of thermochromic and cool coatings considering inter-building effects. Solar Energy, 2020, 209, 493-504.	6.1	48
9	Acoustic comfort in highly attended museums: A dynamical model. Building and Environment, 2020, 183, 107176.	6.9	12
10	Enhancing the strength of symphonic orchestra in an opera house. Applied Acoustics, 2020, 170, 107532.	3.3	3
11	Measuring the speech level and the student activity in lecture halls: Visual- vs blind-segmentation methods. Applied Acoustics, 2020, 169, 107448.	3.3	12
12	Understanding the acoustics of St.ÂJohnâ€™s Baptistery in Pisa through a virtual approach. Journal of Building Performance Simulation, 2020, 13, 320-333.	2.0	10
13	Towards more reliable measurements of sound absorption coefficient in reverberation rooms: An Inter-Laboratory Test. Applied Acoustics, 2020, 165, 107298.	3.3	16
14	A virtual orchestra to qualify the acoustics of historical opera houses. Building Acoustics, 2020, 27, 235-252.	1.9	4
15	The Proscenium of Opera Houses as a Disappeared Intangible Heritage: A Virtual Reconstruction of the 1840s Original Design of the Alighieri Theatre in Ravenna. Acoustics, 2019, 1, 694-710.	1.4	8
16	Fixed Grid Numerical Models for Solidification and Melting of Phase Change Materials (PCMs). Applied Sciences (Switzerland), 2019, 9, 4334.	2.5	27
17	Measuring and identifying background noises in offices during work hours. IOP Conference Series: Materials Science and Engineering, 2019, 609, 042005.	0.6	2
18	Phase change materials (PCM) for building envelope applications: A review of numerical models. AIP Conference Proceedings, 2019, , .	0.4	3

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19	The aesthetics of the Bayreuth Festspielhaus explained by means of acoustic measurements and simulations. Journal of Cultural Heritage, 2018, 34, 151-158.	3.3	16
20	Energy Retrofitting Strategies and Economic Assessments: The Case Study of a Residential Complex Using Utility Bills. Energies, 2018, 11, 2055.	3.1	17
21	Measurement of flanking transmission for the characterisation and classification of cross laminated timber junctions. Applied Acoustics, 2018, 141, 213-222.	3.3	20
22	Comparison of different in situ measurements techniques of intelligibility in an open-plan office. Building Acoustics, 2018, 25, 111-122.	1.9	8
23	Measuring the dynamic stiffness of resilient materials using ESS and MLS signals. Applied Acoustics, 2018, 138, 92-100.	3.3	4
24	The Uncertainty Declaration of Building Acoustics Measurements: How to Select the Uncertainty of Reproducibility from Inter-Laboratory Tests. Acta Acustica United With Acustica, 2018, 104, 295-303.	0.8	2
25	Geometric optimization of morphing fins coupled with a semicircular heat generating body: A numerical investigation on the basis of Bejan's theory. International Communications in Heat and Mass Transfer, 2017, 86, 81-91.	5.6	7
26	The autocorrelation-based analysis as a tool of sound perception in a reverberant field. Rivista Di Estetica, 2017, , 133-147.	0.1	9
27	Recordings of Italian opera orchestra and soloists in a silent room. Proceedings of Meetings on Acoustics, 2016, , .	0.3	8
28	Experimental measurements of flanking transmission in CLT structures. Proceedings of Meetings on Acoustics, 2016, , .	0.3	11
29	Dynamic Simulation on Energy Performance of a School. Energy Procedia, 2016, 101, 1026-1033.	1.8	7
30	Energy management in public institutional and educational buildings: The case of the school of engineering and architecture in Bologna. Energy and Buildings, 2016, 126, 365-374.	6.7	34
31	Overall indoor quality of a non-renewed secondary-school building. Building Acoustics, 2016, 23, 47-58.	1.9	2
32	Standardised acoustic characterisation of sonic crystals noise barriers: Sound insulation and reflection properties. Applied Acoustics, 2016, 114, 294-306.	3.3	74
33	Energy performance of a ventilation system for an apartment according to the Italian regulation. International Journal of Energy and Environmental Engineering, 2016, 7, 353-359.	2.5	10
34	Sound energy distribution in Italian opera houses. Proceedings of Meetings on Acoustics, 2016, , .	0.3	10
35	Energy balance and second law analysis applied to buildings: an opportunity for Bejanâ€™s theory. International Journal of Heat and Technology, 2016, 34, S185-S187.	0.6	3
36	Energy balance and second law analysis applied to buildings: an opportunity for Bejanâ€™s theory. International Journal of Heat and Technology, 2016, 34, S185-S187.	0.6	0

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37	Impulse Responses Measured with MLS or Swept-Sine Signals Applied to Architectural Acoustics: An In-depth Analysis of the Two Methods and Some Case Studies of Measurements Inside Theaters. Energy Procedia, 2015, 78, 1611-1616.	1.8	28
38	Preliminary Energy Audit of the Historical Building of the School of Engineering and Architecture of Bologna. Energy Procedia, 2015, 81, 64-73.	1.8	12
39	Acoustic Measurements on a Sonic Crystals Barrier. Energy Procedia, 2015, 78, 134-139.	1.8	10
40	Overall Indoor Quality of a Non-renewed Secondary-school Building. Energy Procedia, 2015, 78, 3126-3131.	1.8	10
41	Retrofit Strategies Applied to a Tertiary Building Assisted by Trnsys Energy Simulation Tool. Energy Procedia, 2015, 78, 765-770.	1.8	12
42	Extraction of the envelope from impulse responses using pre-processed energy detection for early decay estimation. Journal of the Acoustical Society of America, 2015, 138, 2513-2523.	1.1	11
43	First and second law analysis applied to building envelope: A theoretical approach on the potentiality of Bejanâ€™s theory. Energy Reports, 2015, 1, 181-183.	5.1	11
44	Sound reflection measurements on noise barriers in critical conditions. Building and Environment, 2015, 94, 752-763.	6.9	20
45	Acoustic measurements in eleven Italian opera houses: Correlations between room criteria and considerations on the local evolution of a typology. Building and Environment, 2015, 94, 900-912.	6.9	22
46	Repeatability and Reproducibility of <I>In Situ</I> Measurements of Sound Reflection and Airborne Sound Insulation Index of Noise Barriers. Acta Acustica United With Acustica, 2014, 100, 1186-1201.	0.8	12
47	In-situ measurements of sound reflection and sound insulation of noise barriers: Validation by means of signal-to-noise ratio calculations. Proceedings of Meetings on Acoustics, 2013, , .	0.3	1
48	Advancements in Sound Reflection and Airborne Sound Insulation Measurement on Noise Barriers. Open Journal of Acoustics, 2013, 03, 25-38.	0.3	9
49	A comparison of methods to compute the â€œeffective durationâ€•of the autocorrelation function and an alternative proposal. Journal of the Acoustical Society of America, 2011, 130, 1954-1961.	1.1	12
50	Strategic noise mapping of the agglomeration of Bologna, Italy. WIT Transactions on the Built Environment, 2009, , .	0.0	4
51	In situ measurements of the intrinsic characteristics of the acoustic barriers installed along a new high speed railway line. Noise Control Engineering Journal, 2008, 56, 342.	0.3	6
52	A simple empirical model of polyester fibre materials for acoustical applications. Applied Acoustics, 2005, 66, 1383-1398.	3.3	196
53	Scale Model Investigation on the Influence of Boundary Conditions on the Airborne Sound Insulation of Lightweight Double Walls. Building Acoustics, 2000, 7, 263-276.	1.9	1
54	BOXES AND SOUND QUALITY IN AN ITALIAN OPERA HOUSE. Journal of Sound and Vibration, 2000, 232, 171-191.	3.9	8

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55	European methodology for testing the airborne sound insulation characteristics of noise barriers in situ: Experimental verification and comparison with laboratory data. Journal of the Acoustical Society of America, 2000, 108, 1054.	1.1	46
56	Measurement of the sound-absorption coefficient in situ: The reflection method using periodic pseudo-random sequences of maximum length. Applied Acoustics, 1993, 39, 119-139.	3.3	80
57	Experimental verification of a short method for the determination of the acoustical insulation index of party walls. Applied Acoustics, 1989, 28, 83-94.	3.3	0