

Massimo Garai

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6562657/publications.pdf>

Version: 2024-02-01

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	A simple empirical model of polyester fibre materials for acoustical applications. Applied Acoustics, 2005, 66, 1383-1398.	3.3	196
2	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
3	Standardised acoustic characterisation of sonic crystals noise barriers: Sound insulation and reflection properties. Applied Acoustics, 2016, 114, 294-306.	3.3	74
4	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
5	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
6	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
7	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
8	Fixed Grid Numerical Models for Solidification and Melting of Phase Change Materials (PCMs). Applied Sciences (Switzerland), 2019, 9, 4334.	2.5	27
9	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
10	Sound reflection measurements on noise barriers in critical conditions. Building and Environment, 2015, 94, 752-763.	6.9	20
11	Measurement of flanking transmission for the characterisation and classification of cross laminated timber junctions. Applied Acoustics, 2018, 141, 213-222.	3.3	20
12	Energy Retrofitting Strategies and Economic Assessments: The Case Study of a Residential Complex Using Utility Bills. Energies, 2018, 11, 2055.	3.1	17
13	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
14	Towards more reliable measurements of sound absorption coefficient in reverberation rooms: An Inter-Laboratory Test. Applied Acoustics, 2020, 165, 107298.	3.3	16
15	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
16	A comparison of methods to compute the "effective duration" of the autocorrelation function and an alternative proposal. Journal of the Acoustical Society of America, 2011, 130, 1954-1961.	1.1	12
17	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
18	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

#	ARTICLE	IF	CITATIONS
19	Retrofit Strategies Applied to a Tertiary Building Assisted by Trnsys Energy Simulation Tool. Energy Procedia, 2015, 78, 765-770.	1.8	12
20	Acoustic comfort in highly attended museums: A dynamical model. Building and Environment, 2020, 183, 107176.	6.9	12
21	Measuring the speech level and the student activity in lecture halls: Visual- vs blind-segmentation methods. Applied Acoustics, 2020, 169, 107448.	3.3	12
22	Unsupervised analysis of background noise sources in active offices. Journal of the Acoustical Society of America, 2021, 149, 4049-4060.	1.1	12
23	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
24	First and second law analysis applied to building envelope: A theoretical approach on the potentiality of Bejan's theory. Energy Reports, 2015, 1, 181-183.	5.1	11
25	Experimental measurements of flanking transmission in CLT structures. Proceedings of Meetings on Acoustics, 2016, , .	0.3	11
26	Acoustic Measurements on a Sonic Crystals Barrier. Energy Procedia, 2015, 78, 134-139.	1.8	10
27	Overall Indoor Quality of a Non-renewed Secondary-school Building. Energy Procedia, 2015, 78, 3126-3131.	1.8	10
28	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
29	Understanding the acoustics of St. John's Baptistery in Pisa through a virtual approach. Journal of Building Performance Simulation, 2020, 13, 320-333.	2.0	10
30	Sound energy distribution in Italian opera houses. Proceedings of Meetings on Acoustics, 2016, , .	0.3	10
31	The autocorrelation-based analysis as a tool of sound perception in a reverberant field. Rivista Di Estetica, 2017, , 133-147.	0.1	9
32	Advancements in Sound Reflection and Airborne Sound Insulation Measurement on Noise Barriers. Open Journal of Acoustics, 2013, 03, 25-38.	0.3	9
33	BOXES AND SOUND QUALITY IN AN ITALIAN OPERA HOUSE. Journal of Sound and Vibration, 2000, 232, 171-191.	3.9	8
34	Recordings of Italian opera orchestra and soloists in a silent room. Proceedings of Meetings on Acoustics, 2016, , .	0.3	8
35	Comparison of different in situ measurements techniques of intelligibility in an open-plan office. Building Acoustics, 2018, 25, 111-122.	1.9	8
36	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

#	ARTICLE	IF	CITATIONS
37	Influence of thermal deformations on sound absorption of three-dimensional printed metamaterials. <i>Journal of the Acoustical Society of America</i> , 2022, 151, 3770-3779.	1.1	8
38	Dynamic Simulation on Energy Performance of a School. <i>Energy Procedia</i> , 2016, 101, 1026-1033.	1.8	7
39	Geometric optimization of morphing fins coupled with a semicircular heat generating body: A numerical investigation on the basis of Bejan's theory. <i>International Communications in Heat and Mass Transfer</i> , 2017, 86, 81-91.	5.6	7
40	In situ measurements of the intrinsic characteristics of the acoustic barriers installed along a new high speed railway line. <i>Noise Control Engineering Journal</i> , 2008, 56, 342.	0.3	6
41	Measuring the dynamic stiffness of resilient materials using ESS and MLS signals. <i>Applied Acoustics</i> , 2018, 138, 92-100.	3.3	4
42	A virtual orchestra to qualify the acoustics of historical opera houses. <i>Building Acoustics</i> , 2020, 27, 235-252.	1.9	4
43	Strategic noise mapping of the agglomeration of Bologna, Italy. <i>WIT Transactions on the Built Environment</i> , 2009, , .	0.0	4
44	Phase change materials (PCM) for building envelope applications: A review of numerical models. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	3
45	Enhancing the strength of symphonic orchestra in an opera house. <i>Applied Acoustics</i> , 2020, 170, 107532.	3.3	3
46	Determination of the dispersion relation in cross-laminated timber plates: Benchmarking of time- and frequency-domain methods. <i>Applied Acoustics</i> , 2022, 185, 108400.	3.3	3
47	Energy balance and second law analysis applied to buildings: an opportunity for Bejan's theory. <i>International Journal of Heat and Technology</i> , 2016, 34, S185-S187.	0.6	3
48	Overall indoor quality of a non-renewed secondary-school building. <i>Building Acoustics</i> , 2016, 23, 47-58.	1.9	2
49	Measuring and identifying background noises in offices during work hours. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 609, 042005.	0.6	2
50	The Uncertainty Declaration of Building Acoustics Measurements: How to Select the Uncertainty of Reproducibility from Inter-Laboratory Tests. <i>Acta Acustica United With Acustica</i> , 2018, 104, 295-303.	0.8	2
51	Measuring and modelling the effect of base zone on sound absorption of persian rug. <i>Journal of the Textile Institute</i> , 2022, 113, 2778-2786.	1.9	2
52	Scale Model Investigation on the Influence of Boundary Conditions on the Airborne Sound Insulation of Lightweight Double Walls. <i>Building Acoustics</i> , 2000, 7, 263-276.	1.9	1
53	In-situ measurements of sound reflection and sound insulation of noise barriers: Validation by means of signal-to-noise ratio calculations. <i>Proceedings of Meetings on Acoustics</i> , 2013, , .	0.3	1
54	A newly developed low-cost 3D acoustic positioning system: Description and application in a reverberation room. <i>Applied Acoustics</i> , 2020, 160, 107127.	3.3	1

#	ARTICLE	IF	CITATIONS
55	Measuring and modeling the effect of density and pile height on sound absorption of double base Persian rug. <i>Journal of Industrial Textiles</i> , 2022, 51, 5728S-5755S.	2.4	1
56	Experimental verification of a short method for the determination of the acoustical insulation index of party walls. <i>Applied Acoustics</i> , 1989, 28, 83-94.	3.3	0
57	Energy balance and second law analysis applied to buildings: an opportunity for Bejan's theory. <i>International Journal of Heat and Technology</i> , 2016, 34, S185-S187.	0.6	0