Kimihiro Sakagami

List of Publications by Year
in descending order

101 papers	1,393 citations	377584 21 h-index	466096 32 g-index
112 all docs	112 docs citations	112 times ranked	604 citing authors

#	Article	IF	Citations
1	Modeling microperforated panels and permeable membranes for a room acoustic solver with plane-wave enriched FEM. Applied Acoustics, 2022, 185, 108383.	1.7	5
2	A Parallel Dissipation-Free and Dispersion-Optimized Explicit Time-Domain FEM for Large-Scale Room Acoustics Simulation. Buildings, 2022, 12, 105.	1.4	9
3	On the Robustness and Efficiency of the Plane-Wave-Enriched FEM with Variable q-Approach on the 2D Room Acoustics Problem. Acoustics, 2022, 4, 53-73.	0.8	2
4	Pilot study on numerical prediction of sound reduction index of double window system: Comparison of finite element prediction method with measurement. Acoustical Science and Technology, 2022, 43, 32-42.	0.3	2
5	Development of stackable subwavelength sound absorber based on coiled-up system. Applied Acoustics, 2022, 195, 108842.	1.7	6
6	A Basic Study on the Absorption Properties and Their Prediction of Heterogeneous Micro-Perforated Panels: A Case Study of Micro-Perforated Panels with Heterogeneous Hole Size and Perforation Ratio. Acoustics, 2021, 3, 473-485.	0.8	6
7	Dissipation-free and dispersion-optimized explicit time-domain finite element method for room acoustic modeling. Acoustical Science and Technology, 2021, 42, 270-281.	0.3	3
8	Exploration of efficient numerical integration rule for wideband room-acoustics simulations by plane-wave-enriched finite-element method. Acoustical Science and Technology, 2021, 42, 231-240.	0.3	5
9	Efficiency of room acoustic simulations with time-domain FEM including frequency-dependent absorbing boundary conditions: Comparison with frequency-domain FEM. Applied Acoustics, 2021, 182, 108212.	1.7	11
10	Basic study of practical prediction of sound insulation performance of single-glazed window. Acoustical Science and Technology, 2021, 42, 350-353.	0.3	1
11	Implementation experiment of a honeycomb-backed MPP sound absorber in a meeting room. Applied Acoustics, 2020, 157, 107000.	1.7	27
12	A Note on Variation of the Acoustic Environment in a Quiet Residential Area in Kobe (Japan): Seasonal Changes in Noise Levels Including COVID-Related Variation. Urban Science, 2020, 4, 63.	1.1	5
13	Sustainable Acoustic Materials. Sustainability, 2020, 12, 6540.	1.6	11
14	The Effect of Deviation Due to the Manufacturing Accuracy in the Parameters of an MPP on Its Acoustic Properties: Trial Production of MPPs of Different Hole Shapes Using 3D Printing. Acoustics, 2020, 2, 605-616.	0.8	10
15	Potential of Room Acoustic Solver with Plane-Wave Enriched Finite Element Method. Applied Sciences (Switzerland), 2020, 10, 1969.	1.3	16
16	Experimental assessment of sound insulation performance of a double window with porous absorbent materials its cavity perimeter. Applied Acoustics, 2020, 165, 107317.	1.7	8
17	Time Domain Room Acoustic Solver with Fourth-Order Explicit FEM Using Modified Time Integration. Applied Sciences (Switzerland), 2020, 10, 3750.	1.3	7
18	Locally implicit time-domain finite element method for sound field analysis including permeable membrane sound absorbers. Acoustical Science and Technology, 2020, 41, 689-692.	0.3	2

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19	Implementation of a frequency-dependent impedance boundary model into a room acoustic solver with time-domain finite element method. Acoustical Science and Technology, 2020, 41, 819-822.	0.3	4
20	Time-domain finite element formulation of porous sound absorbers based on an equivalent fluid model. Acoustical Science and Technology, 2020, 41, 837-840.	0.3	7
21	A note on the acoustic environment in a usually quiet residential area after the â€˜state of emergencyâ€™ declaration due to COVID-19 pandemic in Japan was lifted: supplementary survey results in post-emergency situations. Noise Mapping, 2020, 7, 192-198.	0.7	13
22	Application of Paper Folding Technique to Three-Dimensional Space Sound Absorber with Permeable Membrane: Case Studies of Trial Productions. , 2020, 25, 243-247.		4
23	Experimental comparison of absorption characteristics of single-leaf permeable membrane absorbers with different backing air cavity designs. Noise Control Engineering Journal, 2020, 68, 237-245.	0.2	11
24	Diffuse-field sound absorption characteristics of a spherical-microperforated space absorber. Acoustical Science and Technology, 2020, 41, 784-787.	0.3	6
25	Revisiting Acoustics Education Using Mobile Devices to Learn Urban Acoustic Environments: Recent Issues on Current Devices and Applications. Urban Science, 2019, 3, 73.	1.1	8
26	Predicted Absorption Performance of Cylindrical and Rectangular Permeable Membrane Space Sound Absorbers Using the Three-Dimensional Boundary Element Method. Sustainability, 2019, 11, 2714.	1.6	8
27	Note on microperforated panel model using equivalent-fluid-based absorption elements. Acoustical Science and Technology, 2019, 40, 221-224.	0.3	12
28	A Basic Study on a Rectangular Plane Space Sound Absorber Using Permeable Membranes. Sustainability, 2019, 11, 2185.	1.6	11
29	A Pilot Study on the Sound Absorption Characteristics of Chicken Feathers as an Alternative Sustainable Acoustical Material. Sustainability, 2019, 11, 1476.	1.6	17
30	Predicting absorption characteristics of single-leaf permeable membrane absorbers using finite element method in a time domain. Applied Acoustics, 2019, 151, 172-182.	1.7	22
31	Use of Mobile Devices with Multifunctional Sound Level Measurement Applications: Some Experiences for Urban Acoustics Education in Primary and Secondary Schools. Urban Science, 2019, 3, 111.	1.1	7
32	Basic study on relationship between airborne sound transmission and structure-borne sound radiation of a finite elastic plate. Acoustical Science and Technology, 2019, 40, 52-55.	0.3	1
33	Relationship between sound radiations resulting from airborne-sound and point-force excitations of a double-leaf infinite elastic plate. Acoustical Science and Technology, 2019, 40, 325-335.	0.3	0
34	A frequency domain finite element solver for acoustic simulations of 3D rooms with microperforated panel absorbers. Applied Acoustics, 2018, 129, 1-12.	1.7	30
35	Dispersion error reduction of absorption finite elements based on equivalent fluid model. Acoustical Science and Technology, 2018, 39, 362-365.	0.3	4
36	Numerically stable explicit time-domain finite element method for room acoustics simulation using an equivalent impedance model. Noise Control Engineering Journal, 2018, 66, 176-189.	0.2	7

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37	Improved sound absorption performance of three-dimensional MPP space sound absorbers by filling with porous materials. Applied Acoustics, 2017, 116, 311-316.	1.7	25
38	Finite element analysis of absorption characteristics of permeable membrane absorbers array. Acoustical Science and Technology, 2017, 38, 322-325.	0.3	5
39	Relationship between sound radiation from sound-induced and force-excited vibration: Analysis using an infinite elastic plate model. Journal of the Acoustical Society of America, 2016, 140, 453-460.	0.5	3
40	Application of a smartphone for introductory teaching of sound environment: Validation of the precision of the devices and examples of students' work. Acoustical Science and Technology, 2016, 37, 165-172.	0.3	4
41	A time-domain finite element model of permeable membrane absorbers. Acoustical Science and Technology, 2016, 37, 46-49.	0.3	4
42	Use of smartphones for introductory acoustics education. Proceedings of Meetings on Acoustics, 2016, , .	0.3	1
43	An explicit time-domain finite element method for room acoustics simulations: Comparison of the performance with implicit methods. Applied Acoustics, 2016, 104, 76-84.	1.7	18
44	Numerical analyses of the sound absorption of cylindrical microperforated panel space absorbers with cores. Journal of the Acoustical Society of America, 2015, 138, 3531-3538.	0.5	9
45	Applicability of an explicit time-domain finite-element method on room acoustics simulation. Acoustical Science and Technology, 2015, 36, 377-380.	0.3	2
46	Room acoustics simulation with single-leaf microperforated panel absorber using two-dimensional finite-element method. Acoustical Science and Technology, 2015, 36, 358-361.	0.3	6
47	A finite-element formulation for room acoustics simulation with microperforated panel sound absorbing structures: Verification with electro-acoustical equivalent circuit theory and wave theory. Applied Acoustics, 2015, 95, 20-26.	1.7	16
48	On the Relationship between the Normal Incidence Airborne Sound-excited and the Structurally-excited Sound Radiation from a Wall: A Theoretical Trial with Simplified Models. Building Acoustics, 2015, 22, 109-122.	1.1	1
49	An experimental study on the absorption characteristics of a three-dimensional permeable membrane space sound absorber. Noise Control Engineering Journal, 2015, 63, 300-307.	0.2	7
50	A theoretical study on triple-leaf microperforated panel absorbers. Acoustical Science and Technology, 2014, 35, 122-124.	0.3	0
51	Transmission of a spherical sound wave through a single-leaf wall: Mass law for spherical wave incidence. Applied Acoustics, 2014, 75, 67-71.	1.7	12
52	Sound absorption characteristics of a double-leaf structure with an MPP and a permeable membrane. Applied Acoustics, 2014, 76, 28-34.	1.7	33
53	A theoretical study on the effect of a permeable membrane in the air cavity of a double-leaf microperforated panel space sound absorber. Applied Acoustics, 2014, 79, 104-109.	1.7	28
54	Numerical analyses of the sound absorption of three-dimensional MPP space sound absorbers. Applied Acoustics, 2014, 79, 69-74.	1.7	8

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55	Experimental identification of force radiation modes. Noise Control Engineering Journal, 2013, 61, 81-86.	0.2	0
56	Experimental identification of force radiation modes. Noise Control Engineering Journal, 2013, 61, 81-86.	0.2	0
57	An experimental study of a cylindrical microperforated panel sond absorber with core. Noise Control Engineering Journal, 2013, 61, 590-596.	0.2	3
58	A case study of introductory teaching method for architectural/environmental acoustics using a smartphone. Acoustical Science and Technology, 2013, 34, 209-211.	0.3	5
59	An experimental study on a cylindrical microperforated panel space sound absorber. Noise Control Engineering Journal, 2012, 60, 22-28.	0.2	16
60	Reduction of sound radiation by using extended radiation modes: Effects of added mass. Acoustical Science and Technology, 2012, 33, 56-58.	0.3	0
61	Absorption characteristics of a space absorber using a microperforated panel and a permeable membrane. Acoustical Science and Technology, 2011, 32, 47-49.	0.3	14
62	Excess sound absorption at normal incidence by two microperforated panel absorbers with different impedance. Acoustical Science and Technology, 2011, 32, 194-200.	0.3	38
63	Effect of a honeycomb on the sound absorption characteristics of panel-type absorbers. Applied Acoustics, 2011, 72, 943-948.	1.7	55
64	Reduction of sound radiation by using force radiation modes. Applied Acoustics, 2011, 72, 420-427.	1.7	9
65	Effect of a honeycomb on the absorption characteristics of double-leaf microperforated panel (MPP) space sound absorbers. Noise Control Engineering Journal, 2011, 59, 363.	0.2	11
66	Sound absorption of a double-leaf micro-perforated panel with an air-back cavity and a rigid-back wall: Detailed analysis with a Helmholtzâ€"Kirchhoff integral formulation. Applied Acoustics, 2010, 71, 411-417.	1.7	51
67	Sound absorption characteristics of a honeycomb-backed microperforated panel absorber: Revised theory and experimental validation. Noise Control Engineering Journal, 2010, 58, 157.	0.2	25
68	Pilot study on wideband sound absorber obtained by combination of two different microperforated panel (MPP) absorbers. Acoustical Science and Technology, 2009, 30, 154-156.	0.3	57
69	A note on the acoustic properties of a double-leaf permeable membrane. Acoustical Science and Technology, 2009, 30, 390-392.	0.3	3
70	Numerical study on reduction of the elevated structure noise by surface absorption on plate girders. Applied Acoustics, 2009, 70, 1143-1147.	1.7	3
71	Double-leaf microperforated panel space absorbers: A revised theory and detailed analysis. Applied Acoustics, 2009, 70, 703-709.	1.7	90
72	A note on the relationship between the sound absorption by microperforated panels and panel/membrane-type absorbers. Applied Acoustics, 2009, 70, 1131-1136.	1.7	47

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73	A pilot study on improving the absorptivity of a thick microperforated panel absorber. Applied Acoustics, 2008, 69, 179-182.	1.7	37
74	A basic study on the sound field analysis of periodic structures by boundary integral equation method. Applied Acoustics, 2006, 67, 982-995.	1.7	0
75	A numerical study of double-leaf microperforated panel absorbers. Applied Acoustics, 2006, 67, 609-619.	1.7	97
76	A note on the effect of vibration of a microperforated panel on its sound absorption characteristics. Acoustical Science and Technology, 2005, 26, 204-207.	0.3	40
77	Prediction of the reverberation absorption coefficient of finite-size membrane absorbers. Applied Acoustics, 2005, 66, 653-668.	1.7	18
78	Special issue on Room Acoustics in honour of RADS 2004. Acoustical Science and Technology, 2005, 26, 89-89.	0.3	0
79	ANALYSIS OF STRUCTURE BORNE SOUND OF VIADUCT BASED ON PLATE VIBRATION THEORY. Doboku Gakkai Ronbunshu, 2005, 2005, 787_105-787_115.	0.2	0
80	Effect of acoustical damping with a porous absorptive layer in the cavity to reduce the structure-borne sound radiation from a double-leaf structure. Applied Acoustics, 2003, 64, 365-384.	1.7	15
81	Extending the sound impulse response of room using extrapolation. IEEE Transactions on Speech and Audio Processing, 2002, 10, 167-172.	2.0	10
82	Acoustic properties of double-leaf membranes with a permeable leaf on sound incidence side. Applied Acoustics, 2002, 63, 911-926.	1.7	13
83	Sound radiation from a double-leaf elastic plate with a point force excitation: effect of an interior panel on the structure-borne sound radiation. Applied Acoustics, 2002, 63, 737-757.	1.7	28
84	Special section on acoustic imaging. Acoustical Science and Technology, 2002, 23, 28.	0.3	0
85	The role of reflections from behind the listener in spatial impression. Applied Acoustics, 2001, 62, 109-124.	1.7	22
86	Sound radiation from an unbaffled elastic plate strip of infinite length. Applied Acoustics, 2000, 61, 45-63.	1.7	15
87	Sound field radiated by an infinitely long elastic plate strip in contact with a vertical reflecting surface. Applied Acoustics, 2000, 61, 413-425.	1.7	2
88	Absorption characteristics of a double-leaf membrane with a permeable leaf and an absorptive layer in its cavity.. Journal of the Acoustical Society of Japan (E), 2000, 21, 107-109.	0.1	1
89	Effect of an air-back cavity on the sound field reflected by a vibrating plate. Applied Acoustics, 1999, 56, 241-256.	1.7	13
90	Acoustic properties of a cavity backed stage floor: A theoretical model. Applied Acoustics, 1999, 57, 17-27.	1.7	7

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91	A Basic Study on Acoustic Properties of Double-leaf Membranes. Applied Acoustics, 1998, 54, 239-254.	1.7	27
92	Sound radiation from a baffled elastic plate strip of infinite length with various concentrated excitation forces. Applied Acoustics, 1998, 55, 181-202.	1.7	8
93	Reflection of a spherical sound wave by an infinite elastic plate driven to vibration by a point force. Applied Acoustics, 1998, 55, 253-273.	1.7	6
94	Detailed analysis of the acoustic properties of a permeable membrane. Applied Acoustics, 1998, 54, 93-111.	1.7	39
95	Sound absorption of a cavity-backed membrane: A step towards design method for membrane-type absorbers. Applied Acoustics, 1996, 49, 237-247.	1.7	48
96	Reflection of a spherical sound wave by an infinite elastic plate.. Journal of the Acoustical Society of Japan (E), 1995, 16, 71-76.	0.1	3
97	Acoustic reflection by an elastic plate with infinite extent.. Journal of the Acoustical Society of Japan (E), 1993, 14, 85-90.	0.1	5
98	Basic considerations on the practical method for predicting sound insulation performance of a single-leaf window. UCL Open Environment, 0, 2, .	0.0	2
99	Application of transparent microperforated panels to acrylic partitions for desktop use: A case study by prototyping. UCL Open Environment, 0, 2, .	0.0	0
100	How did the â€˜state of emergencyâ€™ declaration in Japan due to the COVID-19 pandemic affect the acoustic environment in a rather quiet residential area?. UCL Open Environment, 0, 2, .	0.0	9
101	Some considerations on the use of space sound absorbers with next-generation materials reflecting COVID situations in Japan: additional sound absorption for post-pandemic challenges in indoor acoustic environments. UCL Open Environment, 0, 2, .	0.0	4