Takao Tsuchiya

List of Publications by Year
in descending order

59	368	759233	888059
papers	citations	12	17
		h-index	g-index

60	60	60	60
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Three-dimensional finite difference-time domain simulation of moving sound source and receiver. Japanese Journal of Applied Physics, 2022, 61, SG1036.	1.5	5
2	Two-dimensional finite difference-time domain simulation of moving sound source and receiver. Acoustical Science and Technology, 2022, 43, 57-65.	0.5	7
3	Analysis of echolocation behavior of bats in â€œecho spaceâ€•using acoustic simulation. BMC Biology, 2022, 20, 59.	3.8	2
4	Reconstruction of echoes reaching bats in flight from arbitrary targets by acoustic simulation. Journal of the Acoustical Society of America, 2022, 151, 2127-2134.	1.1	2
5	Recent techniques on sound field simulation. Japanese Journal of Applied Physics, 2022, 61, SG0801.	1.5	6
6	Effect of bat pinna on sensing using acoustic finite difference time domain simulation. Journal of the Acoustical Society of America, 2022, 151, 4039-4045.	1.1	2
7	Moving sound source with an arbitrary trajectory in the two-dimensional finite-difference time-domain method. Japanese Journal of Applied Physics, 2021, 60, SDDB02.	1.5	9
8	Simulation of pulsed ultrasonic diffraction in viscous fluids using transmission line matrix method. Journal of the Acoustical Society of America, 2021, 149, 2988-2996.	1.1	1
9	Numerical analysis of linear wave propagation in the atmosphere with temperature gradient for Mach cutoff reproduction. Japanese Journal of Applied Physics, 2019, 58, SGGB01.	1.5	9
10	Three-dimensional compact explicit-finite difference time domain scheme with density variation. Japanese Journal of Applied Physics, 2018, 57, 07LC01.	1.5	5
11	Numerical analysis of three-dimensional acoustic field with background flow using constrained interpolation profile method. Japanese Journal of Applied Physics, 2018, 57, 07LC09.	1.5	0
12	A Real-Time Sound Field Rendering Processor. Applied Sciences (Switzerland), 2018, 8, 35.	2.5	4
13	Numerical simulations of sound propagation. Choonpa Igaku, 2018, 45, 15-23.	0.0	0
14	Evaluation of numerical simulation of acoustic wave propagation using method of characteristics-based constrained interpolation profile (CIP-MOC) method with non-uniform grids. Acoustical Science and Technology, 2017, 38, 31-34.	0.5	0
15	Effects of spatial aliasing in sound field reproduction: Reproducibility of binaural signals. Acoustical Science and Technology, 2017, 38, 147-153.	0.5	3
16	Sound Field Simulation and Sound Field Rendering. Ieice Ess Fundamentals Review, 2017, 10, 206-218.	0.1	3
17	Reflective boundary condition with arbitrary boundary shape for compact-explicit finite-difference time-domain method. Japanese Journal of Applied Physics, 2015, 54, 07HC02.	1.5	14
18	Virtual Auditory Display on a Smartphone for High-Resolution Acoustic Space by Remote Rendering. , 2015, , .		3

#	Article	IF	Citations
19	Numerical examination of effects of discretization spacing on accuracy of sound field reproduction. Acoustical Science and Technology, 2015, 36, 362-365.	0.5	4
20	Numerical simulation of sound wave propagation using multimoment method of characteristics with general Hermite interpolation. Acoustical Science and Technology, 2015, 36, 265-267.	0.5	2
21	GPU-computing-based high-speed visualization techniques for sound wave propagation using permeable multi-cross-section contours. Acoustical Science and Technology, 2015, 36, 268-270.	0.5	1
22	Hybrid MM-MOC-based numerical simulation of acoustic wave propagation with non-uniform grid and perfectly matched layer absorbing boundaries. , 2015, , .		0
23	A real-time sound rendering system based on the finite-difference time-domain algorithm. Japanese Journal of Applied Physics, 2014, 53, 07KC14.	1.5	14
24	Virtual Auditory Display by Remote Rendering via Computer Network. , 2014, , .		1
25	Design and implementation of a two-dimensional sound field solver based on the Digital Huygens'™ Model. Microprocessors and Microsystems, 2014, 38, 216-225.	2.8	1
26	A Hardware-Oriented Finite-Difference Time-Domain Algorithm for Sound Field Rendering. Japanese Journal of Applied Physics, 2013, 52, 07HC03.	1.5	14
27	Three-Dimensional Sound Field Analysis Using Compact Explicit-Finite Difference Time Domain Method with Graphics Processing Unit Cluster System. Japanese Journal of Applied Physics, 2013, 52, 07HC11.	1.5	12
28	Examination of Absorbing Boundary Condition Using Perfectly Matched Layer for Collocated Orthogonal Grid in Method of Characteristics. Japanese Journal of Applied Physics, 2013, 52, 07HG05.	1.5	1
29	Subjective Evaluation of High-Definition Virtual Sound Field Using a 157-Channel Surrounding Loudspeaker Array. , 2013, , .		2
30	Large-scale sound field rendering with graphics processing unit cluster for three-dimensional audio with loudspeaker array. Proceedings of Meetings on Acoustics, 2013, , .	0.3	2
31	Design of a FPGA-based Timing Sharing Architecture for Sound Rendering Applications. , 2012, , .		2
32	Evaluation of Acoustic Simulation Using Wave Equation Finite Difference Time Domain Method with Compact Finite Differences. Japanese Journal of Applied Physics, 2012, 51, 07GG06.	1.5	2
33	Performance Comparison of Subgrid Techniques in Acoustic Simulation Using the Type-M and Type-C Constrained Interpolation Profile Methods. Japanese Journal of Applied Physics, 2012, 51, 07GG05.	1.5	0
34	Examination on Fast Algorithms of Compact Finite Difference Calculation for Finite Difference Time Domain Acoustic Wave Simulation. Japanese Journal of Applied Physics, 2011, 50, 07HC12.	1.5	14
35	A real-time sound field renderer based on digital Huygens' model. Journal of Sound and Vibration, 2011, 330, 4302-4312.	3.9	7
36	Two-Dimensional Numerical Analysis of Nonlinear Sound Wave Propagation Using Constrained Interpolation Profile Method Including Nonlinear Effect in Advection Equation. Japanese Journal of Applied Physics, 2011, 50, 07HE17.	1.5	1

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37	Examination of Sub-Grid Technique for Simulation of Sound Wave Propagation Using Constrained Interpolation Profile Method with Method of Characteristics. Japanese Journal of Applied Physics, 2011, 50, 07HC20.	1.5	9
38	Examination on Fast Algorithms of Compact Finite Difference Calculation for Finite Difference Time Domain Acoustic Wave Simulation. Japanese Journal of Applied Physics, 2011, 50, 07HC12.	1.5	4
39	Two-Dimensional Numerical Analysis of Nonlinear Sound Wave Propagation Using Constrained Interpolation Profile Method Including Nonlinear Effect in Advection Equation. Japanese Journal of Applied Physics, 2011, 50, 07HE17.	1.5	2
40	Examination of Sub-Grid Technique for Simulation of Sound Wave Propagation Using Constrained Interpolation Profile Method with Method of Characteristics. Japanese Journal of Applied Physics, 2011, 50, 07HC20.	1.5	1
41	A FPGA implementation of the two-dimensional Digital Huygens' Model. , 2010, , .		3
42	An Improvement of Absorbing Boundary Condition Based on Algorithm of Constrained Interpolation Profile Method for Finite-Difference Time-Domain Acoustic Simulation. Japanese Journal of Applied Physics, 2010, 49, 07HC09.	1.5	13
43	Three-Dimensional Sound Field Rendering with Digital Boundary Condition using Graphics Processing Unit. Japanese Journal of Applied Physics, 2010, 49, 07HC10.	1.5	12
44	Consideration of an absorbing boundary condition based on CIP method for finite-difference time-domain acoustic field analysis. Acoustical Science and Technology, 2009, 30, 132-135.	0.5	5
45	A novel method for numerical simulation of sound wave propagation using Heptic interpolation profile method. , 2009, , .		0
46	Numerical simulation of sound wave propagation using hybrid technique combining FDTD method and CIP method. , 2009, , .		0
47	Numerical Simulation of Acoustic Imaging Using a Combination of Finite Difference Time Domain and Boundary Integral Equation Methods. Japanese Journal of Applied Physics, 2009, 48, 07GN02.	1.5	30
48	Two-Dimensional Simulation of Nonlinear Acoustic Wave Propagation Using Constrained Interpolation Profile Method. Japanese Journal of Applied Physics, 2009, 48, 07GN01.	1.5	22
49	Numerical Simulation of Nonlinear Sound Wave Propagation Using Constrained Interpolation Profile Method: One-Dimensional Case. Japanese Journal of Applied Physics, 2008, 47, 3952-3958.	1.5	23
50	Performances of Various Types of Constrained Interpolation Profile Method for Two-Dimensional Numerical Acoustic Simulation. Japanese Journal of Applied Physics, 2008, 47, 3962-3963.	1.5	28
51	Implementation of normal incidence absorption coefficient for boundary condition of digital Huygens' model. Acoustical Science and Technology, 2008, 29, 326-328.	0.5	2
52	Numerical Simulation of Sound Wave Propagation with Sound Absorption Using Digital Huygens' Model. Japanese Journal of Applied Physics, 2007, 46, 4809-4812.	1.5	17
53	Digital Equivalent Circuits for Acoustic Field Based on Discrete Huygens' Modeling. Japanese Journal of Applied Physics, 2005, 44, 4297-4300.	1.5	18
54	On the Passive Vibration Damping by Piezoelectric Transducers with Inductive Loading. Lecture Notes in Computer Science, 2005, , 197-204.	1.3	1

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55	Equivalent circuit representation of a vibrating structure with piezoelectric transducers and the stability consideration in the active damping control. Smart Materials and Structures, 2001, 10, 389-394.	3.5	11
56	Optimization of the frequency characteristics in saw filter design. Inverse Problems in Science and Engineering, 2000, 8, 473-493.	0.5	1
57	Frequency characteristic optimization in surface acoustic wave filters by DFP approaches. , 1998, , 519-528.		1
58	A simulation study on nonlinear sound propagation by finite element approach.. Journal of the Acoustical Society of Japan (E), 1992, 13, 223-230.	0.1	8
59	Finite element analysis of focusing transducers and their responses. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi Tsushin Gakkai) Tj ETQq1 1 0.784314 rgBT /Overlock 10		