Thomas HÃ©lie

List of Publications by Year
in descending order

29 papers	264 citations	1040056 9 h-index	940533 16 g-index
29 all docs	29 docs citations	29 times ranked	133 citing authors

#	Article	IF	Citations
1	Input/output reduced model of a damped nonlinear beam based on Volterra series and modal decomposition with convergence results. Nonlinear Dynamics, 2021, 105, 515-540.	5.2	2
2	From statistical physics to macroscopic port-Hamiltonian Systems: A roadmap. IFAC-PapersOnLine, 2021, 54, 70-75.	0.9	0
3	Identification of Nonlinear Circuits as Port-Hamiltonian Systems. , 2021, , .		0
4	Simulation of an Ondes Martenot Circuit. IEEE/ACM Transactions on Audio Speech and Language Processing, 2020, 28, 2651-2660.	5.8	1
5	Correction of the Doppler distortion generated by a vibrating baffled piston. Acta Acustica, 2020, 4, 2.	1.0	0
6	Active control of the axisymmetric vibration modes of a tom-tom drum. , 2019, , .		0
7	Simulation of the Ondes Martenot Ribbon-Controlled Oscillator Using Energy-Balanced Modeling of Nonlinear Time-Varying Electronic Components. AES: Journal of the Audio Engineering Society, 2019, 67, 961-971.	1.0	1
8	Passive simulation of the nonlinear port-Hamiltonian modeling of a Rhodes Piano. Journal of Sound and Vibration, 2017, 390, 289-309.	3.9	14
9	Passive Guaranteed Simulation of Analog Audio Circuits: A Port-Hamiltonian Approach. Applied Sciences (Switzerland), 2016, 6, 273.	2.5	27
10	Nonlinear damping models for linear conservative mechanical systems with preserved eigenspaces: a port-Hamiltonian formulation. IFAC-PapersOnLine, 2015, 48, 200-205.	0.9	3
11	Computable convergence bounds of series expansions for infinite dimensional linear-analytic systems and application. Automatica, 2014, 50, 2334-2340.	5.0	4
12	Introducing a Green–Volterra series formalism to solve weakly nonlinear boundary problems: Application to Kirchhoff's string. Journal of Sound and Vibration, 2014, 333, 2073-2086.	3.9	9
13	A class of damping models preserving eigenspaces for linear conservative port-Hamiltonian systems. European Journal of Control, 2013, 19, 486-494.	2.6	17
14	One-Dimensional Acoustic Models of Horns and Comparison with Measurements. Acta Acustica United With Acustica, 2013, 99, 960-974.	0.8	10
15	Computation of Convergence Bounds for Volterra Series of Linear-Analytic Single-Input Systems. IEEE Transactions on Automatic Control, 2011, 56, 2062-2072.	5.7	28
16	From a Model of Lossy Flared Pipes to a General Framework for Simulation of Waveguides. Acta Acustica United With Acustica, 2011, 97, 477-491.	0.8	5
17	Asymptotic State Observers for a Simplified Brass Instrument Model. Acta Acustica United With Acustica, 2010, 96, 733-742.	0.8	2
18	Convergence of series expansions for some infinite dimensional nonlinear systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 282-288.	0.4	1

#	Article	IF	Citations
19	Digital Waveguide Modeling for Wind Instruments: Building a State–Space Representation Based on the Webster–Lokshin Model. IEEE Transactions on Audio Speech and Language Processing, 2010, 18, 843-854.	3.2	7
20	Computation of convergence radius and error bounds of Volterra series for multiple input systems with an analytic nonlinearity in state. , 2010, , .		1
21	Computation of convergence radius and error bounds of Volterra series for single input systems with a polynomial nonlinearity. , 2009, , .		3
22	Sound synthesis of a nonlinear string using Volterra series. Journal of Sound and Vibration, 2008, 314, 275-306.	3.9	21
23	Simulation of the weakly nonlinear propagation in a straight pipe: application to a real-time brassy audio effect. , 2008, , .		4
24	Waveguide Modeling of Lossy Flared Acoustic Pipes: Derivation of a Kelly-Lochbaum Structure for Real-Time Simulations. , 2007, , .		4
25	Representations with poles and cuts for the time-domain simulation of fractional systems and irrational transfer functions. Signal Processing, 2006, 86, 2516-2528.	3.7	23
26	Volterra series for solving weakly non-linear partial differential equations: application to a dissipative Burgers' equation. International Journal of Control, 2004, 77, 1071-1082.	1.9	29
27	Unidimensional models of acoustic propagation in axisymmetric waveguides. Journal of the Acoustical Society of America, 2003, 114, 2633.	1.1	42
28	Modélisation physique d'instruments de musique en systèmes dynamiques et inversion. Journal Europeen Des Systemes Automatises, 2003, 37, 1305-1310.	0.4	2
29	A Webster-Lokshin Model for Waves with Viscothermal Losses and Impedance Boundary Conditions: Strong Solutions. , 2003, , 66-71.		4