SÃ©bastien Grondel

List of Publications by Year
in descending order

50 papers	939 citations	430874 18 h-index	454955 30 g-index
50 all docs	50 docs citations	50 times ranked	733 citing authors

#	Article	IF	Citations
1	Modeling and Experimental Analysis of the Mass Loading Effect on Micro-Ionic Polymer Actuators Using Step Response Identification. Journal of Microelectromechanical Systems, 2021, 30, 243-252.	2.5	1
2	Very large amplitude vibrations of flexible structures: Experimental identification and validation of a quadratic drag damping model. Journal of Fluids and Structures, 2020, 97, 103056.	3.4	18
3	Effects of the electrical limit conditions on the electromechanical behavior of piezoelectric transducer arrays. , 2020, , .		0
4	Demonstrating Full Integration Process for Electroactive Polymer Microtransducers to Realize Soft Microchips. , 2020, , .		4
5	PEDOT:PSS-based micromuscles and microsensors fully integrated in flexible chips. Smart Materials and Structures, 2020, 29, 09LT01.	3.5	4
6	Dynamic simulation and optimization of artificial insect-sized flapping wings for a bioinspired kinematics using a two resonant vibration modes combination. Journal of Sound and Vibration, 2019, 460, 114883.	3.9	5
7	One-dimensional equivalent circuit for ultrasonic transducer arrays. Applied Acoustics, 2019, 156, 246-257.	3.3	17
8	Ultrathin electrochemically driven conducting polymer actuators: fabrication and electrochemomechanical characterization. Electrochimica Acta, 2018, 265, 670-680.	5.2	23
9	Nonlinear dynamic modeling of ultrathin conducting polymer actuators including inertial effects. Smart Materials and Structures, 2018, 27, 115032.	3.5	10
10	Two modes resonant combined motion for insect wings kinematics reproduction and lift generation. Europhysics Letters, 2018, 121, 66001.	2.0	11
11	A validated simulation of energy harvesting with piezoelectric cantilever beams on a vehicle suspension using Bond Graph approach. Mechatronics, 2018, 53, 202-214.	3.3	19
12	Microfabricated PEDOT trilayer actuators: synthesis, characterization, and modeling. , 2017, , .		4
13	Linear finite-difference bond graph model of an ionic polymer actuator. Smart Materials and Structures, 2017, 26, 095055.	3.5	6
14	Coupling of Two Resonant Modes for Insect Wing Mimicking in a Flexible-Wing NAV and Generate Lift. , 2017, , .		1
15	Modeling and simulation of the vertical take off and energy consumption of a vibrating wing nano air vehicle. , 2016, , .		1
16	Bond Graph modeling for fault detection and isolation of a train door mechatronic system. Control Engineering Practice, 2016, 49, 212-224.	5.5	34
17	A Model to Predict Modal Radiation by Finite-sized Sources in Composite Plates with Account of Caustics. Physics Procedia, 2015, 70, 622-625.	1.2	0
18	Real-time monitoring and diagnosis of a train door mechatronic system. , 2014, , .		2

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19	Modeling and evaluation of power transmission of flapping wing nano air vehicle. , 2014, , .		6
20	Extension of the crosstalk cancellation method in ultrasonic transducer arrays from the harmonic regime to the transient one. Ultrasonics, 2014, 54, 720-724.	3.9	3
21	Electrical method for crosstalk cancellation in transducer arrays. NDT and E International, 2014, 62, 115-121.	3.7	15
22	Simulation and measurement of the steady-state temperature in multi-core cables. Electric Power Systems Research, 2014, 116, 54-66.	3.6	23
23	Reducing crosstalk in array structures by controlling the excitation voltage of individual elements: A feasibility study. Ultrasonics, 2013, 53, 1135-1140.	3.9	12
24	Numerical study of the cross-talk effects in acoustical transducer arrays and correction. Proceedings of Meetings on Acoustics, 2013, , .	0.3	4
25	Application of the Piezoelectricity in an Active and Passive Health Monitoring System. , 2013, , .		0
26	Power Harvesting Capabilities of SHM Ultrasonic Sensors. Smart Materials Research, 2012, 2012, 1-7.	0.5	3
27	Microfabrication of bio-inspired SU-8 wings and initial analyses of their aeroelastic behaviours for microrobotic insects. , 2011, , .		0
28	Improved micromachining of all SU-8 3D structures for a biologically-inspired flying robot. Microelectronic Engineering, 2011, 88, 2218-2224.	2.4	23
29	Design and fabrication of insect-inspired composite wings for MAV application using MEMS technology. Journal of Micromechanics and Microengineering, 2011, 21, 125020.	2.6	36
30	Applicability of acoustic noise correlation for structural health monitoring in nondiffuse field conditions. Applied Physics Letters, 2009, 95, 094104.	3.3	28
31	Experimental study of the A0 and S0 Lamb waves interaction with symmetrical notches. Ultrasonics, 2009, 49, 202-205.	3.9	32
32	Study of the fundamental Lamb modes interaction with asymmetrical discontinuities. NDT and E International, 2008, 41, 330-340.	3.7	51
33	Study of the fundamental Lamb modes interaction with symmetrical notches. NDT and E International, 2008, 41, 1-9.	3.7	51
34	Application of a pseudo-3D modeling to Lamb waves generation by a surface-bonded apodized transducer: Experimental results. , 2008, , .		0
35	Modeling a surface-mounted Lamb wave emission-reception system: Applications to structural health monitoring. Journal of the Acoustical Society of America, 2008, 124, 3521-3527.	1.1	6
36	Experimental Lamb mode identification in a plate containing a hole using dual signal processing. Measurement Science and Technology, 2008, 19, 125703.	2.6	3

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37	Vibrating wing analysis with passive torsion for micro flying robot. , 2008, , .		2
38	Design, analysis and fabrication of high frequency piezoelectric transducers. Journal of Electroceramics, 2007, 19, 395-398.	2.0	1
39	Pseudo-3D modeling of a surface-bonded Lamb wave source. Journal of the Acoustical Society of America, 2006, 119, 2575-2578.	1.1	16
40	Optimized piezoelectric sensor for a specific application: Detection of Lamb waves. Sensors and Actuators A: Physical, 2006, 126, 362-368.	4.1	20
41	Health monitoring of a composite wingbox structure. Ultrasonics, 2004, 42, 819-824.	3.9	77
42	Signal processing for damage detection using two different array transducers. Ultrasonics, 2004, 42, 803-806.	3.9	27
43	Transient modeling of Lamb waves generated in viscoelastic materials by surface bonded piezoelectric transducers. Journal of the Acoustical Society of America, 2004, 116, 133-141.	1.1	16
44	Damage assessment in composites by Lamb waves and wavelet coefficients. Smart Materials and Structures, 2003, 12, 393-402.	3.5	87
45	Design of optimal configuration for generating A0 Lamb mode in a composite plate using piezoceramic transducers. Journal of the Acoustical Society of America, 2002, 112, 84-90.	1.1	89
46	Fatigue crack monitoring of riveted aluminium strap joints by Lamb wave analysis and acoustic emission measurement techniques. NDT and E International, 2002, 35, 137-146.	3.7	88
47	<title>Damage assessment in smart composite structures: the DAMASCOS program</title>. , 2001, 4327, 223.		10
48	Modeling of integrated Lamb waves generation systems using a coupled finite elementâ€“normal modes expansion method. Ultrasonics, 2000, 38, 522-526.	3.9	23
49	The propagation of Lamb waves in multilayered plates: phase-velocity measurement. Measurement Science and Technology, 1999, 10, 348-353.	2.6	24
50	Experimental study of the fundamental Lamb waves interaction with symmetrical notches. , 0, , .		3