

# SÃ©bastien Grondel

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7919648/publications.pdf>

Version: 2024-02-01

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	Design of optimal configuration for generating A0 Lamb mode in a composite plate using piezoceramic transducers. <i>Journal of the Acoustical Society of America</i> , 2002, 112, 84-90.	1.1	89
2	Fatigue crack monitoring of riveted aluminium strap joints by Lamb wave analysis and acoustic emission measurement techniques. <i>NDT and E International</i> , 2002, 35, 137-146.	3.7	88
3	Damage assessment in composites by Lamb waves and wavelet coefficients. <i>Smart Materials and Structures</i> , 2003, 12, 393-402.	3.5	87
4	Health monitoring of a composite wingbox structure. <i>Ultrasonics</i> , 2004, 42, 819-824.	3.9	77
5	Study of the fundamental Lamb modes interaction with asymmetrical discontinuities. <i>NDT and E International</i> , 2008, 41, 330-340.	3.7	51
6	Study of the fundamental Lamb modes interaction with symmetrical notches. <i>NDT and E International</i> , 2008, 41, 1-9.	3.7	51
7	Design and fabrication of insect-inspired composite wings for MAV application using MEMS technology. <i>Journal of Micromechanics and Microengineering</i> , 2011, 21, 125020.	2.6	36
8	Bond Graph modeling for fault detection and isolation of a train door mechatronic system. <i>Control Engineering Practice</i> , 2016, 49, 212-224.	5.5	34
9	Experimental study of the A0 and S0 Lamb waves interaction with symmetrical notches. <i>Ultrasonics</i> , 2009, 49, 202-205.	3.9	32
10	Applicability of acoustic noise correlation for structural health monitoring in nondiffuse field conditions. <i>Applied Physics Letters</i> , 2009, 95, 094104.	3.3	28
11	Signal processing for damage detection using two different array transducers. <i>Ultrasonics</i> , 2004, 42, 803-806.	3.9	27
12	The propagation of Lamb waves in multilayered plates: phase-velocity measurement. <i>Measurement Science and Technology</i> , 1999, 10, 348-353.	2.6	24
13	Modeling of integrated Lamb waves generation systems using a coupled finite element "normal modes expansion method. <i>Ultrasonics</i> , 2000, 38, 522-526.	3.9	23
14	Improved micromachining of all SU-8 3D structures for a biologically-inspired flying robot. <i>Microelectronic Engineering</i> , 2011, 88, 2218-2224.	2.4	23
15	Simulation and measurement of the steady-state temperature in multi-core cables. <i>Electric Power Systems Research</i> , 2014, 116, 54-66.	3.6	23
16	Ultrathin electrochemically driven conducting polymer actuators: fabrication and electrochemomechanical characterization. <i>Electrochimica Acta</i> , 2018, 265, 670-680.	5.2	23
17	Optimized piezoelectric sensor for a specific application: Detection of Lamb waves. <i>Sensors and Actuators A: Physical</i> , 2006, 126, 362-368.	4.1	20
18	A validated simulation of energy harvesting with piezoelectric cantilever beams on a vehicle suspension using Bond Graph approach. <i>Mechatronics</i> , 2018, 53, 202-214.	3.3	19

#	ARTICLE	IF	CITATIONS
19	Very large amplitude vibrations of flexible structures: Experimental identification and validation of a quadratic drag damping model. <i>Journal of Fluids and Structures</i> , 2020, 97, 103056.	3.4	18
20	One-dimensional equivalent circuit for ultrasonic transducer arrays. <i>Applied Acoustics</i> , 2019, 156, 246-257.	3.3	17
21	Transient modeling of Lamb waves generated in viscoelastic materials by surface bonded piezoelectric transducers. <i>Journal of the Acoustical Society of America</i> , 2004, 116, 133-141.	1.1	16
22	Pseudo-3D modeling of a surface-bonded Lamb wave source. <i>Journal of the Acoustical Society of America</i> , 2006, 119, 2575-2578.	1.1	16
23	Electrical method for crosstalk cancellation in transducer arrays. <i>NDT and E International</i> , 2014, 62, 115-121.	3.7	15
24	Reducing crosstalk in array structures by controlling the excitation voltage of individual elements: A feasibility study. <i>Ultrasonics</i> , 2013, 53, 1135-1140.	3.9	12
25	Two modes resonant combined motion for insect wings kinematics reproduction and lift generation. <i>Europhysics Letters</i> , 2018, 121, 66001.	2.0	11
26	<title>Damage assessment in smart composite structures: the DAMASCOS program</title>. , 2001, 4327, 223.		10
27	Nonlinear dynamic modeling of ultrathin conducting polymer actuators including inertial effects. <i>Smart Materials and Structures</i> , 2018, 27, 115032.	3.5	10
28	Modeling a surface-mounted Lamb wave emission-reception system: Applications to structural health monitoring. <i>Journal of the Acoustical Society of America</i> , 2008, 124, 3521-3527.	1.1	6
29	Modeling and evaluation of power transmission of flapping wing nano air vehicle. , 2014, , .		6
30	Linear finite-difference bond graph model of an ionic polymer actuator. <i>Smart Materials and Structures</i> , 2017, 26, 095055.	3.5	6
31	Dynamic simulation and optimization of artificial insect-sized flapping wings for a bioinspired kinematics using a two resonant vibration modes combination. <i>Journal of Sound and Vibration</i> , 2019, 460, 114883.	3.9	5
32	Numerical study of the cross-talk effects in acoustical transducer arrays and correction. <i>Proceedings of Meetings on Acoustics</i> , 2013, , .	0.3	4
33	Microfabricated PEDOT trilayer actuators: synthesis, characterization, and modeling. , 2017, , .		4
34	Demonstrating Full Integration Process for Electroactive Polymer Microtransducers to Realize Soft Microchips. , 2020, , .		4
35	PEDOT:PSS-based micromuscles and microsensors fully integrated in flexible chips. <i>Smart Materials and Structures</i> , 2020, 29, 09LT01.	3.5	4
36	Experimental Lamb mode identification in a plate containing a hole using dual signal processing. <i>Measurement Science and Technology</i> , 2008, 19, 125703.	2.6	3

#	ARTICLE	IF	CITATIONS
37	Power Harvesting Capabilities of SHM Ultrasonic Sensors. Smart Materials Research, 2012, 2012, 1-7.	0.5	3
38	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
39	Experimental study of the fundamental Lamb waves interaction with symmetrical notches. , 0, , .		3
40	Vibrating wing analysis with passive torsion for micro flying robot. , 2008, , .		2
41	Real-time monitoring and diagnosis of a train door mechatronic system. , 2014, , .		2
42	Design, analysis and fabrication of high frequency piezoelectric transducers. Journal of Electroceramics, 2007, 19, 395-398.	2.0	1
43	Modeling and simulation of the vertical take off and energy consumption of a vibrating wing nano air vehicle. , 2016, , .		1
44	Coupling of Two Resonant Modes for Insect Wing Mimicking in a Flexible-Wing NAV and Generate Lift. , 2017, , .		1
45	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
46	Application of a pseudo-3D modeling to Lamb waves generation by a surface-bonded apodized transducer: Experimental results. , 2008, , .		0
47	Microfabrication of bio-inspired SU-8 wings and initial analyses of their aeroelastic behaviours for microrobotic insects. , 2011, , .		0
48	Application of the Piezoelectricity in an Active and Passive Health Monitoring System. , 2013, , .		0
49	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
50	Effects of the electrical limit conditions on the electromechanical behavior of piezoelectric transducer arrays. , 2020, , .		0