Patrice Le Moal

List of Publications by Year
in descending order

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30	353	840776 11	839539 18
papers	citations	h-index	g-index

30	30	30	288
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A piezo-mechanical characterization of PZT thick films screen-printed on alumina substrate. Sensors and Actuators A: Physical, 2002, 96, 157-166.	4.1	65
2	Mass sensor using mode localization in two weakly coupled MEMS cantilevers with different lengths: Design and experimental model validation. Sensors and Actuators A: Physical, 2019, 295, 643-652.	4.1	55
3	Functionalization of electrostatic nonlinearities to overcome mode aliasing limitations in the sensitivity of mass microsensors based on energy localization. Applied Physics Letters, 2020, 117, .	3.3	30
4	Dynamic electro-thermo-mechanical modelling of a U-shaped electro-thermal actuator. Journal of Micromechanics and Microengineering, 2016, 26, 025010.	2.6	29
5	Mechanical energy transductions in standing wave ultrasonic motors: Analytical modelling and experimental investigations. European Journal of Mechanics, A/Solids, 2000, 19, 849-871.	3.7	23
6	Modeling and Stress Analysis of a Pre-Shaped Curved Beam: Influence of High Modes of Buckling. International Journal of Applied Mechanics, 2015, 07, 1550055.	2.2	21
7	Towards a better understanding of the CMUTs potential for SHM applications. Sensors and Actuators A: Physical, 2020, 313, 112212.	4.1	19
8	On the design of a preshaped curved beam bistable mechanism. Mechanism and Machine Theory, 2019, 131, 204-217.	4.5	14
9	Squeeze film damping and stiffening in circular CMUT with air-filled cavity: Influence of the lateral venting boundary conditions and the bias voltage. Sensors and Actuators A: Physical, 2017, 266, 15-23.	4.1	13
10	Design and fabrication of novel discrete actuators for microrobotic tasks. Sensors and Actuators A: Physical, 2018, 271, 373-382.	4.1	13
11	Toward Standard Method for Microelectromechanical Systems Material Measurement through On-Chip Electrostatic Probing of Micrometer Size Polysilicon Tensile Specimens. Japanese Journal of Applied Physics, 2001, 40, L120-L122.	1.5	12
12	Design optimization of bistable modules electrothermally actuated for digital microrobotics. , 2014, , .		8
13	Micromachined Traveling Wave Motors: Three Dimensional Mechanical Optimization and Miniaturization Limits Evaluation. Japanese Journal of Applied Physics, 1997, 36, 7009-7018.	1.5	6
14	Mechanical stop mechanism for overcoming MEMS fabrication tolerances. Journal of Micromechanics and Microengineering, 2017, 27, 017001.	2.6	6
15	Dynamic and acoustic modeling of capacitive micromachined ultrasonic transducers. , 2011, , .		5
16	Analysis of the dynamic behavior of a doped silicon U-shaped electrothermal actuator. , 2015, , .		5
17	CMUT-Based Sensor for Acoustic Emission Application: Experimental and Theoretical Contributions to Sensitivity Optimization. Sensors, 2021, 21, 2042.	3.8	5
18	On-Chip Investigation of Torque/Speed Characteristics on New High-Torque Micrometer-Size Polysilicon Electrostatic Actuators. Japanese Journal of Applied Physics, 2001, 40, L596-L599.	1.5	4

#	Article	IF	Citations
19	Compact Digital Microrobot Based on Multistable Modules. IEEE Robotics and Automation Letters, 2021, 6, 1926-1933.	5.1	4
20	Direct-Drive Electrostatic Micromotors Using Flexible Polysilicon Rotors. Journal of Intelligent Material Systems and Structures, 1998, 9, 829-836.	2.5	3
21	Characterization of capacitive micromachined ultrasonic transducers. Microsystem Technologies, 2016, 22, 593-601.	2.0	3
22	Modal parameter identification of a CMUT membrane using response data only. Mechanics and Industry, 2017, 18, 702.	1.3	2
23	CMUT sensors based on circular membranes array for SHM applications. , 2019, , .		2
24	Acoustic Emission Sensing using MEMS for Structural Health Monitoring: Demonstration of a Newly Designed Capacitive Micro Machined Ultrasonic Transducer. , 0, , .		2
25	Investigation of Output Mechanical Power Limits on High-Torque Electrostatic Actuators Using High-Frequency Complementary Metal Oxide Semiconductor (CMOS) Camera Combined with Image Processing Software. Japanese Journal of Applied Physics, 2002, 41, L678-L681.	1.5	1
26	Interferometry system for out-of-plane microdisplacement measurement: application to mechanical expertise of scratch drive actuators. , 2003, , .		1
27	Experimental characterization of nonlinear static and dynamic behaviors of circular capacitive microplates with initial deflection. Nonlinear Dynamics, 2021, 103, 2329-2343.	5.2	1
28	Mode Localization in Two Coupled Nearly Identical MEMS Cantilevers for Mass Sensing. , 2019, , .		1
29	Characterization of capacitive micromachined ultrasonic transducers. , 2014, , .		0
30	Joint Optimization of the Number of Clusters and Their Parameters in Acoustic Emission Clustering. Lecture Notes in Civil Engineering, 2021, , 109-116.	0.4	0