Alberto Corigliano

List of Publications by Year
in descending order

203	4,948	101543	118850
papers	citations	36 h-index	62 g-index

223	223	223	2897
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A thermal actuator for nanoscalein situmicroscopy testing: design and characterization. Journal of Micromechanics and Microengineering, 2006, 16, 242-253.	2.6	262
2	Damage analysis of interlaminar fracture specimens. Composite Structures, 1995, 31, 61-74.	5.8	244
3	Formulation, identification and use of interface models in the numerical analysis of composite delamination. International Journal of Solids and Structures, 1993, 30, 2779-2811.	2.7	171
4	Modeling and simulation of crack propagation in mixed-modes interlaminar fracture specimens. International Journal of Fracture, 1996, 77, 111-140.	2.2	146
5	Mechanical behavior of a syntactic foam: experiments and modeling. International Journal of Solids and Structures, 2000, 37, 5773-5794.	2.7	139
6	Parameter identification in explicit structural dynamics: performance of the extended Kalman filter. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 3807-3835.	6.6	139
7	A Resonant Microaccelerometer With High Sensitivity Operating in an Oscillating Circuit. Journal of Microelectromechanical Systems, 2010, 19, 1140-1152.	2.5	139
8	Mechanical Characterization of Polysilicon Through On-Chip Tensile Tests. Journal of Microelectromechanical Systems, 2004, 13, 200-219.	2.5	119
9	Experimental characterization and numerical simulations of a syntactic-foam/glass-fibre composite sandwich. Composites Science and Technology, 2000, 60, 2169-2180.	7.8	107
10	Modeling and experimental verification of an ultra-wide bandgap in 3D phononic crystal. Applied Physics Letters, 2016, 109, .	3.3	107
11	3D auxetic single material periodic structure with ultra-wide tunable bandgap. Scientific Reports, 2018, 8, 2262.	3.3	96
12	Geometrical and interfacial non-linearities in the analysis of delamination in composites. International Journal of Solids and Structures, 1999, 36, 2189-2216.	2.7	94
13	Graded elastic metasurface for enhanced energy harvesting. New Journal of Physics, 2020, 22, 013013.	2.9	92
14	Self-induced parametric amplification arising from nonlinear elastic coupling in a micromechanical resonating disk gyroscope. Scientific Reports, 2015, 5, 9036.	3.3	91
15	Solid damping in micro electro mechanical systems. Meccanica, 2008, 43, 419-428.	2.0	88
16	Rate-dependent interface models: formulation and numerical applications. International Journal of Solids and Structures, 2001, 38, 547-576.	2.7	85
17	Impact induced composite delamination: state and parameter identification via joint and dual extended Kalman filters. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 5242-5272.	6.6	67
18	Multi-scale Analysis of MEMS Sensors Subject to Drop Impacts. Sensors, 2007, 7, 1817-1833.	3.8	63

#	Article	IF	Citations
19	Low frequency 3D ultra-wide vibration attenuation via elastic metamaterial. Scientific Reports, 2019, 9, 8039.	3.3	59
20	Some aspects of interlaminar degradation in composites. Computer Methods in Applied Mechanics and Engineering, 2000, 185, 203-224.	6.6	56
21	Experimental evaluation and numerical modeling of adhesion phenomena in polysilicon MEMS. Meccanica, 2013, 48, 1835-1844.	2.0	56
22	Model Order Reduction and domain decomposition strategies for the solution of the dynamic elasticâ€“plastic structural problem. Computer Methods in Applied Mechanics and Engineering, 2015, 290, 127-155.	6.6	55
23	Dynamic shakedown analysis and bounds for elastoplastic structures with nonassociative, internal variable constitutive laws. International Journal of Solids and Structures, 1995, 32, 3145-3166.	2.7	53
24	Experimental verification of a bridge-shaped, nonlinear vibration energy harvester. Applied Physics Letters, 2014, 105, .	3.3	51
25	Experimental investigation of amplification, via a mechanical delay-line, in a rainbow-based metamaterial for energy harvesting. Applied Physics Letters, 2020, 117, .	3.3	51
26	Mechanical low-frequency filter via modes separation in 3D periodic structures. Applied Physics Letters, 2017, 111, .	3.3	50
27	Modeling Impact-induced Failure of Polysilicon MEMS: A Multi-scale Approach. Sensors, 2009, 9, 556-567.	3.8	47
28	A discrete formulation for elastic solids with damaging interfaces. Computer Methods in Applied Mechanics and Engineering, 1997, 140, 329-359.	6.6	45
29	Numerical modeling of rate-dependent debonding processes in composites. Composite Structures, 2003, 61, 39-50.	5.8	45
30	Numerical analysis of rate-dependent dynamic composite delamination. Composites Science and Technology, 2006, 66, 766-775.	7.8	45
31	Extremum properties of finite-step solutions in elastoplasticity with nonlinear mixed hardening. International Journal of Solids and Structures, 1991, 27, 965-981.	2.7	42
32	Title is missing!. International Journal of Fracture, 2000, 104, 349-373.	2.2	40
33	Parameter identification of a time-dependent elastic-damage interface model for the simulation of debonding in composites. Composites Science and Technology, 2001, 61, 191-203.	7.8	40
34	A three-scale FE approach to reliability analysis of MEMS sensors subjectÂtoÂimpacts. Meccanica, 2008, 43, 469-483.	2.0	40
35	Polysilicon MEMS accelerometers exposed to shocks: numericalâ€“experimental investigation. Journal of Micromechanics and Microengineering, 2009, 19, 035023.	2.6	39
36	Monte carlo simulation of micro-cracking in polysilicon MEMS exposed to shocks. International Journal of Fracture, 2011, 167, 83-101.	2.2	38

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37	Selective Mode Conversion and Rainbow Trapping via Graded Elastic Waveguides. Physical Review Applied, 2021, 16, .	3.8	37
38	Simulation of damage in composites by means of interface models: parameter identification. Composites Science and Technology, 2001, 61, 2299-2315.	7.8	35
39	Synthesis of auxetic structures using optimization of compliant mechanisms and a micropolar material model. Structural and Multidisciplinary Optimization, 2017, 55, 1-12.	3.5	35
40	OVERALL ELASTIC PROPERTIES OF POLYSILICON FILMS: A STATISTICAL INVESTIGATION OF THE EFFECTS OF POLYCRYSTAL MORPHOLOGY. International Journal for Multiscale Computational Engineering, 2011, 9, 327-346.	1.2	34
41	Compact biaxial micromachined resonant accelerometer. Journal of Micromechanics and Microengineering, 2013, 23, 105012.	2.6	33
42	A resonant micro accelerometer based on electrostatic stiffness variation. Meccanica, 2013, 48, 1893-1900.	2.0	32
43	Improved one-dimensional model of piezoelectric laminates for energy harvesters including three dimensional effects. Composite Structures, 2015, 127, 369-381.	5.8	32
44	Modelling of spontaneous adhesion phenomena in micro-electro-mechanical systems. European Journal of Mechanics, A/Solids, 2013, 39, 144-152.	3.7	31
45	Numerical solution of the Duffing equation with random coefficients. Meccanica, 2015, 50, 1841-1853.	2.0	30
46	The First 3D-Printed and Wet-Metallized Three-Axis Accelerometer With Differential Capacitive Sensing. IEEE Sensors Journal, 2019, 19, 9131-9138.	4.7	30
47	Fully convolutional networks for structural health monitoring through multivariate time series classification. Advanced Modeling and Simulation in Engineering Sciences, 2020, 7, .	1.7	30
48	Dynamic shakedown in elastoplastic structures with general internal variable constitutive laws. International Journal of Plasticity, 1991, 7, 679-692.	8.8	29
49	Finite elements with embedded displacement discontinuity: a generalized variable formulation. International Journal for Numerical Methods in Engineering, 2000, 49, 1227-1266.	2.8	29
50	Two-Scale Simulation of Drop-Induced Failure of Polysilicon MEMS Sensors. Sensors, 2011, 11, 4972-4989.	3.8	29
51	Online structural health monitoring by model order reduction and deep learning algorithms. Computers and Structures, 2021, 255, 106604.	4.4	29
52	The First 3-D-Printed z-Axis Accelerometers With Differential Capacitive Sensing. IEEE Sensors Journal, 2018, 18, 53-60.	4.7	28
53	Numerical modelling of impact rupture in polysilicon microsystems. Computational Mechanics, 2008, 42, 251-259.	4.0	27
54	Domain decomposition and model order reduction methods applied to the simulation of multi-physics problems in MEMS. Computers and Structures, 2013, 122, 113-127.	4.4	27

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55	Optimal 2D auxetic micro-structures with band gap. Meccanica, 2019, 54, 2001-2027.	2.0	27
56	A design strategy to match the band gap of periodic and aperiodic metamaterials. Scientific Reports, 2020, 10, 16403.	3.3	27
57	Mechanical behaviour of a syntactic foam/glass fibre composite sandwich: experimental results. Structural Engineering and Mechanics, 2001, 12, 169-188.	1.0	27
58	A new on-chip test structure for real time fatigue analysis in polysilicon MEMS. Microelectronics Reliability, 2009, 49, 120-126.	1.7	26
59	Dynamic nonlinear behavior of torsional resonators in MEMS. Journal of Micromechanics and Microengineering, 2014, 24, 095025.	2.6	26
60	On the application of piezolaminated composites to diaphragm micropumps. Composite Structures, 2013, 99, 231-240.	5.8	25
61	3-D Design and Simulation of a Piezoelectric Micropump. Micromachines, 2019, 10, 259.	2.9	24
62	A metaplate for complete 3D vibration isolation. European Journal of Mechanics, A/Solids, 2020, 84, 104016.	3.7	24
63	MEMS-based surface mounted health monitoring system for composite laminates. Microelectronics Journal, 2013, 44, 598-605.	2.0	23
64	Sensitivity and temperature behavior of a novelz-axis differential resonant micro accelerometer. Journal of Micromechanics and Microengineering, 2016, 26, 035006.	2.6	23
65	On-Chip Electrostatically Actuated Bending Tests for the Mechanical Characterization of Polysilicon at the Micro Scale. Meccanica, 2005, 40, 485-503.	2.0	22
66	A high sensitivity uniaxial resonant accelerometer. , 2010, , .		22
67	A new MEMS three-axial frequency-modulated (FM) gyroscope: a mechanical perspective. European Journal of Mechanics, A/Solids, 2018, 70, 203-212.	3.7	22
68	A microsystem for the fracture characterization of polysilicon at the micro-scale. European Journal of Mechanics, A/Solids, 2011, 30, 127-136.	3.7	21
69	SHM under varying environmental conditions: an approach based on model order reduction and deep learning. Computers and Structures, 2022, 266, 106790.	4.4	21
70	A PLATE MODEL FOR THE EVALUATION OF PULL-IN INSTABILITY OCCURRENCE IN ELECTROSTATIC MICROPUMP DIAPHRAGMS. International Journal of Applied Mechanics, 2011, 03, 1-19.	2.2	20
71	Non-linear mechanics in resonant inertial micro sensors. International Journal of Non-Linear Mechanics, 2020, 120, 103386.	2.6	19
72	Geometry optimization of a Lorentz force, resonating MEMS magnetometer. Microelectronics Reliability, 2014, 54, 1192-1199.	1.7	18

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73	Advanced models for the calculation of capillary attraction in axisymmetric configurations. European Journal of Mechanics, A/Solids, 2014, 47, 298-308.	3.7	18
74	An Efficient Earth Magnetic Field MEMS Sensor: Modeling, Experimental Results, and Optimization. Journal of Microelectromechanical Systems, 2015, 24, 887-895.	2.5	18
75	Multiphysics modelling and experimental validation of an air-coupled array of PMUTs with residual stresses. Journal of Micromechanics and Microengineering, 2018, 28, 054005.	2.6	18
76	Out of plane vs in plane flexural behaviour of thin polysilicon films: Mechanical characterization and application of the Weibull approach. Microelectronics Reliability, 2005, 45, 1758-1763.	1.7	17
77	On-Chip Mechanical Characterization using an Electro-thermo-mechanical Actuator. Experimental Mechanics, 2010, 50, 695-707.	2.0	17
78	Enhancing the Linear Range of MEMS Resonators for Sensing Applications. IEEE Sensors Journal, 2011, 11, 3202-3210.	4.7	17
79	Overall elastic domain of thin polysilicon films. Computational Materials Science, 2011, 50, 2993-3004.	3.0	17
80	A Differential Resonant Micro Accelerometer for Out-of-plane Measurements. Procedia Engineering, 2014, 87, 640-643.	1.2	17
81	Predicting the closed-loop stability and oscillation amplitude of nonlinear parametrically amplified oscillators. Applied Physics Letters, 2015, 106, .	3.3	17
82	Design, Fabrication and Experimental Validation of a Metaplate for Vibration Isolation in MEMS. Journal of Microelectromechanical Systems, 2020, 29, 1401-1410.	2.5	17
83	Wearable Ball-Impact Piezoelectric Multi-Converters for Low-Frequency Energy Harvesting from Human Motion. Sensors, 2022, 22, 772.	3.8	16
84	The effect of nano-scale interaction forces on the premature pull-in of real-life Micro-Electro-Mechanical Systems. Microelectronics Reliability, 2012, 52, 271-281.	1.7	15
85	Identification of a constitutive model for the simulation of time-dependent interlaminar debonding processes in composites. Computer Methods in Applied Mechanics and Engineering, 2002, 191, 1861-1894.	6.6	14
86	Modelling of interlaminar fracture processes in composites using interface elements. Composites Science and Technology, 2006, 66, 255-263.	7.8	14
87	A new biaxial silicon resonant micro accelerometer. , 2011, , .		14
88	Physically-Based Reduced Order Modelling of a Uni-Axial Polysilicon MEMS Accelerometer. Sensors, 2012, 12, 13985-14003.	3.8	14
89	Advanced Model for Fast Assessment of Piezoelectric Micro Energy Harvesters. Frontiers in Materials, 2016, 3, .	2.4	14
90	On uniqueness of the dynamic finite-step problem in gradient-dependent softening plasticity. International Journal of Solids and Structures, 1996, 33, 3881-3902.	2.7	13

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91	Design of piezoMEMS for high strain rate nanomechanical experiments. Extreme Mechanics Letters, 2018, 20, 14-20.	4.1	13
92	Design, fabrication and experimental validation of a MEMS periodic auxetic structure. Smart Materials and Structures, 2019, 28, 095011.	3.5	13
93	Enhanced Energy Harvesting of Flexural Waves in Elastic Beams by Bending Mode of Graded Resonators. Frontiers in Materials, 2021, 8, .	2.4	13
94	Numerical and experimental evaluation of the magnetic interaction for frequency up-conversion in piezoelectric vibration energy harvesters. Meccanica, 2022, 57, 1139-1154.	2.0	13
95	Dynamic Analysis of Elastoplastic Softening Discretized Structures. Journal of Engineering Mechanics - ASCE, 1992, 118, 2352-2375.	2.9	12
96	Anisotropic behaviour of porous, ductile media. International Journal of Solids and Structures, 2001, 38, 2427-2451.	2.7	12
97	Design of high stroke electrostatic micropumps: a charge control approach with ring electrodes. Microsystem Technologies, 2011, 17, 165-173.	2.0	12
98	Sensitivity, probabilistic and stochastic analysis of the thermo-piezoelectric phenomena in solids by the stochastic perturbation technique. Meccanica, 2012, 47, 877-891.	2.0	12
99	A domain decomposition technique applied to the solution of the coupled electroâ€mechanical problem. International Journal for Numerical Methods in Engineering, 2013, 93, 137-159.	2.8	12
100	Non linear response and optimization of a new z-axis resonant micro-accelerometer. Mechatronics, 2016, 40, 235-243.	3.3	12
101	Nonlinear dynamics under varying temperature conditions of the resonating beams of a differential resonant accelerometer. Journal of Micromechanics and Microengineering, 2018, 28, 075004.	2.6	12
102	An Autoencoder-Based Deep Learning Approach for Load Identification in Structural Dynamics. Sensors, 2021, 21, 4207.	3.8	12
103	Multiscale finite-element models for predicting spontaneous adhesion in MEMS. Mecanique Et Industries, 2010, 11, 177-182.	0.2	11
104	A domain decomposition approach for the simulation of fracture phenomena in polycrystalline microsystems. Computer Methods in Applied Mechanics and Engineering, 2014, 277, 180-218.	6.6	11
105	Air-coupled PMUT at 100 kHz with PZT active layer and residual stresses: Multiphysics model and experimental validation. , 2017, , .		11
106	Experimental and numerical evidence of comparable levels of attenuation in periodic and a-periodic metastructures. Applied Physics Letters, 2019, 115, .	3.3	11
107	Electro-Thermal Actuator for On-Chip Nanoscale Tensile Tests: Analytical Modelling and Multi-Physics Simulations. Sensor Letters, 2007, 5, 592-607.	0.4	11
108	Generalized midpoint finite element dynamic analysis of elastoplastic systems. International Journal for Numerical Methods in Engineering, 1993, 36, 361-383.	2.8	10

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109	Damage and Fracture Mechanics Techniques for Composite Structures. , 2003, , 459-539.		9
110	A new two-beam differential resonant micro accelerometer. , 2009, , .		9
111	Multiphysics Analysis and Experimental Validation of an air Coupled Piezoelectric Micromachined Ultrasonic Transducer with Residual Stresses. Procedia Engineering, 2016, 168, 852-855.	1.2	9
112	Evaluation of adhesion in microsystems using equivalent rough surfaces modeled with spherical caps. European Journal of Mechanics, A/Solids, 2016, 57, 121-131.	3.7	9
113	Piezo-micro-ultrasound-transducers for air-coupled arrays: Modeling and experiments in the linear and non-linear regimes. Extreme Mechanics Letters, 2020, 40, 100968.	4.1	9
114	On the Effects of Package on the PMUTs Performancesâ€"Multiphysics Model and Frequency Analyses. Micromachines, 2020, 11, 307.	2.9	9
115	On the numerical evaluation of capacitance and electrostatic forces in MEMS. , 2009, , .		8
116	Modeling of a Bridge-Shaped Nonlinear Piezoelectric Energy Harvester. Energy Harvesting and Systems, 2014, 1, .	2.7	8
117	A New Approach for the Control and Reduction of Warpage and Residual Stresses in Bonded Wafer. Micromachines, 2021, 12, 361.	2.9	8
118	Analysis of ductile fracture in damaged pipelines by a geometric parameter method. Engineering Structures, 1999, 21, 924-936.	5.3	7
119	Coupled domain decompositionâ€"proper orthogonal decomposition methods for the simulation of quasi-brittle fracture processes. Advanced Modeling and Simulation in Engineering Sciences, 2016, 3, .	1.7	7
120	Air-Coupled Array of Pmuts at 100 kHz with PZT Active Layer: Multiphysics Model and Experiments. , 2019, , .		7
121	Air-coupled PMUTs array with residual stresses: experimental tests in the linear and non-linear dynamic regime. International Journal of Smart and Nano Materials, 2020, 11, 387-399.	4.2	7
122	On-chip tensile test for epitaxial polysilicon. , 0, , .		6
123	Recent Advances in Computational Methods for Microsystems. Advanced Materials Research, 2013, 745, 13-25.	0.3	6
124	Microsystems and Mechanics. Procedia IUTAM, 2014, 10, 138-160.	1.2	6
125	Modelling and characterization of circular microplate electrostatic actuators for micropump applications. , 2015, , .		6
126	Top-down, multi-scale numerical simulation of MEMS microphones under guided free fall tests. Microelectronics Reliability, 2021, 121, 114129.	1.7	6

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127	Model order reduction for the analysis of large arrays of piezoelectric micromachined ultrasonic transducers in water. Applied Acoustics, 2021, 182, 108231.	3.3	6
128	From mechanics to acoustics: Critical assessment of a robust metamaterial for acoustic insulation application. Applied Acoustics, 2021, 183, 108311.	3.3	6
129	Rupture Tests on Polysilicon Films Through on-Chip Electrostatic Actuation. Sensor Letters, 2006, 4, 38-45.	0.4	6
130	Efficient Modeling and Simulation of PMUT Arrays in Various Ambients. Micromachines, 2022, 13, 962.	2.9	6
131	Numerical analysis of discretized elastoplastic systems using the generalized midâ€point time integration. Engineering Computations, 1994, 11, 389-411.	1.4	5
132	On the analysis of spontaneous adhesion in MEMS. , 2009, , .		5
133	Finite Element modelling of adhesion phenomena in MEMS. , 2010, , .		5
134	Modelling of a bridge-shaped nonlinear piezoelectric energy harvester. Journal of Physics: Conference Series, 2013, 476, 012100.	0.4	5
135	Modelling and experimental verification of a single phase three-dimensional lightweight locally resonant elastic metamaterial with complete low frequency bandgap. , 2017, , .		5
136	The First Frequency-Modulated (FM) Pitch Gyroscope. Proceedings (mdpi), 2017, 1, 393.	0.2	5
137	Multi-Scale Modeling of Shock-Induced Failure of Polysilicon MEMS. , 2007, , .		4
138	A polysilicon test structure for fatigue and fracture testing in micro electro mechanical devices. , 2008, , .		4
139	An experimental assessment of Casimir force effect in micro-electromechanical systems. , 2008, , .		4
140	Design issues in electrostatic microplate actuators: Device stability and post pull-in behaviour. , 2011, , .		4
141	Optimal design and nonlinearities in a z-axis resonant accelerometer. , 2015, , .		4
142	Torsional Microresonator in the Nonlinear Regime: Experimental, Numerical and Analytical Characterization. Procedia Engineering, 2016, 168, 933-936.	1.2	4
143	Optimization of auxetic structures for MEMS applications. , 2016, , .		4
144	A 3D Printed Ti6Al4V Alloy Uniaxial Capacitive Accelerometer. IEEE Sensors Journal, 2021, 21, 19640-19646.	4.7	4

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145	Out of Plane Flexural Behaviour of Thin Polysilicon Films: Mechanical Characterization and Application of the Weibull Approach. Sensor Letters, 2006, 4, 184-190.	0.4	4
146	A Metaplate in MEMS for innovative applications: vibration isolation and tunable mechanical filters. , 2020, , .		4
147	Microstructured Phononic Crystal Isolates from Ultrasonic Mechanical Vibrations. Applied Sciences (Switzerland), 2022, 12, 2499.	2.5	4
148	Study of the mechanical behaviour of a macroscopic glassâ€“polyester composite by ESPI method and numerical simulations. Composites Science and Technology, 2004, 64, 1829-1841.	7.8	3
149	Simulation of Impact Rupture in Polysilicon Mems. , 0, , .		3
150	Structural Integrity Assessment of a Pipeline Subjected to an Underwater Explosion. , 2011, , .		3
151	A multi-scale approach to wafer to wafer metallic bonding in MEMS. , 2013, , .		3
152	Optimal design of a resonating MEMS magnetometer: A multi-physics approach. , 2013, , .		3
153	Numerical simulations of piezoelectric MEMS energy harvesters. , 2014, , .		3
154	An efficient earth magnetic field MEMS sensor: Modelling and experimental results. , 2014, , .		3
155	On the dynamics of a high frequency oscillator for mechanical watches. Mechanism and Machine Theory, 2017, 117, 276-293.	4.5	3
156	3D-printing and wet metallization for uniaxial and multi-axial accelerometers. , 2018, , .		3
157	Wide low frequency bandgap in imperfect 3D modular structures based on modes separation. Mechanics Research Communications, 2020, 105, 103512.	1.8	3
158	Micro-Scale Simulation of Impact Rupture in Polysilicon MEMS. , 2006, , 647-648.		3
159	Mechanical Characterization of Low-Dimensional Structures Through On-Chip Tests. , 2008, , 349-383.		3
160	CONSTITUTIVE MODELLING OF COMPOSITES AND LAMINATES VIA HOMOGENISATION AND PARAMETER IDENTIFICATION. , 2000, , 449-457.		3
161	Reduced Order Modeling of Composite Laminates Through Solid-Shell Coupling. Journal of Aerospace Technology and Management, 2017, 9, 397-403.	0.3	3
162	Mechanical characterization of epitaxial polysilicon in MEMS. , 2003, , 722-726.		3

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163	A multiscale-stochastic finite element approach to shock-induced polysilicon MEMS failure. , 2009, , .		2
164	A domain decomposition method for the simulation of fracture in polysilicon MEMS. Microelectronics Reliability, 2013, 53, 1045-1054.	1.7	2
165	Design, Fabrication and Testing of the First 3D-Printed and Wet Metallized z-Axis Accelerometer. Proceedings (mdpi), 2017, 1, .	0.2	2
166	Experimental-Numerical Assessment of Impact-Induced Damage in Cross-Ply Laminates. Advanced Structured Materials, 2010, , 493-504.	0.5	2
167	Numerical Simulation of Impact-Induced Rupture in Polysilicon MEMS. Sensor Letters, 2008, 6, 35-42.	0.4	2
168	Mechanics of Microsystems: A Recent Journey in a Fascinating Branch of Mechanics. , 2022, , 419-435.		2
169	Rupture tests on polysilicon films through on-chip electrostatic actuation [MEMS applications]. , 0, , .		1
170	Out of plane flexural behaviour of thin polysilicon films: mechanical characterization and application of the weibull approach. , 0, , .		1
171	Parametric Study of Fracture Properties in Polycrystalline MEMS. , 2007, , .		1
172	Intrinsic dissipation in microelectromechanical systems. , 2008, , .		1
173	Real-time monitoring of the fatigue damage accumulation in polysilicon microstructures at different applied stresses. , 2009, , .		1
174	Two-scale vs three-scale FE analyses of shock-induced failure in polysilicon MEMS. , 2010, , .		1
175	An on-chip experimental assessment Of Casimir force effect in micro-electromechanical systems. , 2010, , .		1
176	On the nonlinear behaviour of MEMS resonators. , 2011, , .		1
177	A kinetic model for capillary flows in MEMS. , 2012, , .		1
178	Experimental and numerical assessment of adhesion in real-life MEMS. , 2012, , .		1
179	A domain decomposition method for the simulation of fracture in polysilicon MEMS. , 2012, , .		1
180	Micro- or nano-mechanics. Meccanica, 2013, 48, 1817-1818.	2.0	1

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181	Integrated structure for a resonant micro-gyroscope and accelerometer. Frattura Ed Integrita Strutturale, 2014, 8, 334-342.	0.9	1
182	Experimental verification of a bridge-shaped, non-linear vibration energy harvesters. , 2014, , .		1
183	A highly efficient simulation technique for piezoelectric energy harvesters. Journal of Physics: Conference Series, 2015, 660, 012141.	0.4	1
184	High speed vision system for the dynamic characterization of 3D printed sensors. Journal of Physics: Conference Series, 2019, 1249, 012001.	0.4	1
185	Towards 3-Axis FM Mems Gyroscopes: Mechanical Design and Experimental Validation. , 2019, , .		1
186	Convergence of the Newton-Raphson Method in Elastic-Plastic-Softening Structural Dynamics. , 1991, , 258-265.		1
187	Elasto-Plastic Interface Law for Non-Homogeneous Materials: Formulation, Sensitivity Analysis, Parameter Identification. Solid Mechanics and Its Applications, 2002, , 233-242.	0.2	1
188	Unscented Kalman Filter Empowered by Bayesian Model Evidence for System Identification in Structural Dynamics. , 2021, 2, .		1
189	An investigation on the magnetic interaction for frequency up-converting piezoelectric vibration energy harvesters. , 2021, , .		1
190	Linear and Nonlinear Mechanics in MEMS. , 2022, , 389-437.		1
191	The role of anchor imposed motion in the failure of MEMS microphones under free fall tests. Microelectronics Reliability, 2022, 135, 114584.	1.7	1
192	On the evaluation of damping forces in MEMS. , 0, , .		0
193	Numerical-experimental comparison of low-g and high-g tests on a polysilicon MEMS accelerometer. , 2008, , .		0
194	Mechanical Characterization of Polysilicon at the Micro-Scale Through On-Chip Tests. Computational and Experimental Methods in Structures, 2008, , 427-454.	0.3	0
195	A three-scale approach to the numerical simulation of metallic bonding for MEMS packaging. Microelectronics Reliability, 2014, 54, 2039-2043.	1.7	0
196	Thermo-electrical and structural coupled simulations of buckling beam microprobes in high temperature/high current conditions. , 2014, , .		0
197	Modelling and Simulation of Glass Frit Bonding of Silicon Wafers. , 2019, , .		0
198	Numerical Analysis of Impact Induced Failure for MEMS Membranes during Guided Free Fall Tests. , 2020, , .		0

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199	A Time Series Autoencoder for Load Identification via Dimensionality Reduction of Sensor Recordings. , 0, , .		0
200	Failure of MEMS Microphones During Impact Tests: the Role of Anchor Imposed Motion. , 2021, , .		0
201	Impact Induced Composite Delamination: State and Parameter Identification via Unscented Kalman Filter. , 2006, , 1251-1252.		0
202	A Generative Adversarial Network Based Autoencoder for Structural Health Monitoring. , 2021, 2, .		0
203	Static and Dynamic Analyses of Actuation Devices in Electrostatic Micro-Pumps. , 0, , .		0