

Matteo Aureli

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9212396/publications.pdf>

Version: 2024-02-01

56
papers

1,515
citations

430754

18
h-index

315616

38
g-index

56
all docs

56
docs citations

56
times ranked

1034
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparison of Transport Equation-Based Cavitation Models and Application To Industrial Pumps With Inducers. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2022, 144, .	0.8	3
2	A Plate-Like Sensor for the Identification of Sample Viscoelastic Properties Using Contact Resonance Atomic Force Microscopy. <i>ASME Letters in Dynamic Systems and Control</i> , 2021, 1, .	0.4	1
3	Sensor Egregiumâ€™ An Atomic Force Microscope Sensor for Continuously Variable Resonance Amplification. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 2021, 143, .	1.0	3
4	Exterior Dissipation, Proportional Decay, and Integrals of Motion. <i>Physical Review Letters</i> , 2021, 127, 134101.	2.9	2
5	Ionic polymer metal composite compression sensors with 3D-structured interfaces. <i>Smart Materials and Structures</i> , 2021, 30, 125027.	1.8	9
6	Finite amplitude torsional oscillations of shape-morphing plates immersed in viscous fluids. <i>Physics of Fluids</i> , 2020, 32, .	1.6	7
7	Multivariable control of ball-milled reactive material composition and structure. <i>Journal of Manufacturing Processes</i> , 2020, 53, 238-249.	2.8	2
8	Cavitation Performance of Constant and Variable Pitch Helical Inducers for Centrifugal Pumps: Effect of Inducer Tip Clearance. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2020, 142, .	0.8	13
9	A Novel Plate-Like Sensor Utilizing Curvature-Based Stiffening for Nanometrology Applications. , 2020, , .		0
10	Ionic Polymer Metal Composite Sensors With Engineered Interfaces (eIPMCs): Compression Sensing Modeling and Experiments. , 2020, , .		0
11	Contact Resonance Atomic Force Microscopy Using Long, Massive Tips. <i>Sensors</i> , 2019, 19, 4990.	2.1	5
12	Torsional Oscillations of a Shape-Morphing Plate in Viscous Fluids. , 2019, , .		0
13	Experimental study of oscillating plates in viscous fluids: Qualitative and quantitative analysis of the flow physics and hydrodynamic forces. <i>Physics of Fluids</i> , 2018, 30, .	1.6	23
14	Three-dimensional analysis of hydrodynamic forces and power dissipation in shape-morphing cantilevers oscillating in viscous fluids. <i>International Journal of Mechanical Sciences</i> , 2018, 149, 436-451.	3.6	17
15	Small amplitude oscillations of a shape-morphing plate immersed in a viscous fluid near a solid wall. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	6
16	Thermostructural observation and adaptive control of fractal structure in ball-milled materials. <i>Materials and Design</i> , 2018, 160, 772-782.	3.3	3
17	Bimetallic diffusion modeling and temperature regulation during ballâ€™milling. <i>Materials and Design</i> , 2018, 155, 233-243.	3.3	4
18	Plate geometries for contact resonance atomic force microscopy: Modeling, optimization, and verification. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	7

#	ARTICLE	IF	CITATIONS
19	Non-equilibrium microscale thermomechanical modeling of bimetallic particulate fractal structures during ball milling fabrication. <i>Journal of Applied Physics</i> , 2017, 122, 025118.	1.1	6
20	Nonlinear oscillations of shape-morphing submerged structures: Control of hydrodynamic forces and power dissipation via active flexibility. <i>Journal of Fluids and Structures</i> , 2017, 74, 35-52.	1.5	15
21	Three-Dimensional Analysis of Shape-Morphing Cantilever Oscillations in Viscous Fluids. , 2017, , .		1
22	Mechanics and energetics modeling of ball-milled metal foil and particle structures. <i>Acta Materialia</i> , 2017, 123, 305-316.	3.8	11
23	Qualitative and Quantitative Study of the Flow Physics in the Vicinity of an Oscillating Plate in Viscous Fluids. , 2017, , .		0
24	Minimization of Hydrodynamic Power Losses in Oscillating Submerged Structures by a Novel Shape-Morphing Strategy. , 2016, , .		1
25	Modulation of Nonlinear Hydrodynamic Damping in Finite Amplitude Underwater Oscillations of Flanged Structures. , 2015, , .		0
26	Fused Filament Additive Manufacturing of Ionic Polymer-Metal Composite Soft Active 3D Structures. , 2015, , .		4
27	Fused filament 3D printing of ionic polymer-metal composites (IPMCs). <i>Smart Materials and Structures</i> , 2015, 24, 125021.	1.8	109
28	Finite amplitude oscillations of flanged laminas in viscous flows: Vortex-structure interactions for hydrodynamic damping control. <i>Journal of Fluids and Structures</i> , 2015, 59, 297-315.	1.5	19
29	Modulus-density negative correlation for CNT-reinforced polymer nanocomposites: Modeling and experiments. <i>Composites Part B: Engineering</i> , 2015, 70, 175-183.	5.9	14
30	A framework for iterative analysis of non-classically damped dynamical systems. <i>Journal of Sound and Vibration</i> , 2014, 333, 6688-6705.	2.1	6
31	Nonlinear sensing of ionic polymer metal composites. <i>Continuum Mechanics and Thermodynamics</i> , 2013, 25, 273-310.	1.4	71
32	Nonlinear buckling of a spherical shell embedded in an elastic medium with imperfect interface. <i>International Journal of Solids and Structures</i> , 2013, 50, 2310-2327.	1.3	21
33	Finite amplitude vibrations of cantilevers of rectangular cross sections in viscous fluids. <i>Journal of Fluids and Structures</i> , 2013, 40, 52-69.	1.5	61
34	Finite Amplitude Underwater Torsional Vibrations of Cantilevers. , 2012, , .		0
35	Finite Amplitude Underwater Flexural Vibrations of Cantilevers. , 2012, , .		0
36	On a Physics-Based Model of the Electrical Impedance of Ionic Polymer Metal Composites. , 2012, , .		2

#	ARTICLE	IF	CITATIONS
37	A physics-based model of the electrical impedance of ionic polymer metal composites. Journal of Applied Physics, 2012, 111, .	1.1	77
38	Nonlinear finite amplitude torsional vibrations of cantilevers in viscous fluids. Journal of Applied Physics, 2012, 111, .	1.1	27
39	Effect of electrode surface roughness on the electrical impedance of ionic polymer-metal composites. Smart Materials and Structures, 2012, 21, 105030.	1.8	36
40	Nonlinear finite amplitude vibrations of sharp-edged beams in viscous fluids. Journal of Sound and Vibration, 2012, 331, 1624-1654.	2.1	111
41	Portraits of self-organization in fish schools interacting with robots. Physica D: Nonlinear Phenomena, 2012, 241, 908-920.	1.3	36
42	On a Physics-Based Model for Nonlinear Sensing in Ionic Polymer Metal Composites. , 2012, , .		1
43	Transverse harmonic oscillations of laminae in viscous fluids: a lattice Boltzmann study. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2456-2466.	1.6	63
44	A Model of Self-Propelled Particles Coordinating Under External Leadership. , 2011, , .		0
45	Buoyant Fluorescent Particles as a Novel Sensing Technology for Field Observations of Water Flows. , 2011, , .		1
46	Interactions Between Fish and Robots: An Experimental Study. , 2010, , .		3
47	Effect of polydispersivity and porosity on the elastic properties of hollow particle filled composites. Mechanics of Materials, 2010, 42, 726-739.	1.7	38
48	Control-oriented modeling of Ionic Polymer Metal Composites for biomimetic underwater propulsion. , 2010, , .		5
49	Characterization of Buoyant Fluorescent Particles for Field Observations of Water Flows. Sensors, 2010, 10, 11512-11529.	2.1	25
50	Coordination of self-propelled particles through external leadership. Europhysics Letters, 2010, 92, 40004.	0.7	24
51	Free-Locomotion of Underwater Vehicles Actuated by Ionic Polymer Metal Composites. IEEE/ASME Transactions on Mechatronics, 2010, 15, 603-614.	3.7	289
52	Low frequency and large amplitude oscillations of cantilevers in viscous fluids. Applied Physics Letters, 2010, 96, .	1.5	75
53	Energy harvesting from base excitation of ionic polymer metal composites in fluid environments. Smart Materials and Structures, 2010, 19, 015003.	1.8	181
54	Capacitance boost in ionic polymer metal composites due to electrode surface roughness. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
55	On the capacitance-boost of ionic polymer metal composites due to electroless plating: Theory and experiments. <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	77
56	Free-Locomotion of a Fish-Like Robotic Swimmer Propelled by a Vibrating Ionic Polymer Metal Composite. , 2009, , .		0