Matteo Pezzulla

List of Publications by Year
in descending order

25 papers	645 citations	623188 14 h-index	676716 22 g-index
25 all docs	25 docs citations	25 times ranked	582 citing authors

#	Article	IF	Citations
1	A Kirchhoff-like theory for hard magnetic rods under geometrically nonlinear deformation in three dimensions. Journal of the Mechanics and Physics of Solids, 2022, 160, 104739.	2.3	34
2	A geometrically exact model for thin magneto-elastic shells. Journal of the Mechanics and Physics of Solids, 2022, 166, 104916.	2.3	11
3	Magneto-active elastic shells with tunable buckling strength. Nature Communications, 2021, 12, 2831.	5.8	41
4	The remarkable bending properties of perforated plates. Journal of the Mechanics and Physics of Solids, 2021, 154, 104514.	2.3	8
5	Nonlinear buckling behavior of a complete spherical shell under uniform external pressure and homogenous natural curvature. Physical Review E, 2020, 102, 023003.	0.8	11
6	Buckling of pressurized spherical shells containing a through-thickness defect. Journal of the Mechanics and Physics of Solids, 2020, 138, 103923.	2.3	22
7	Deformation of porous flexible strip in low and moderate Reynolds number flows. Physical Review Fluids, 2020, 5, .	1.0	14
8	Evolution of critical buckling conditions in imperfect bilayer shells through residual swelling. Soft Matter, 2019, 15, 6134-6144.	1.2	12
9	Buckling of geometrically confined shells. Soft Matter, 2019, 15, 1215-1222.	1.2	26
10	Hydrodynamic loading of perforated disks in creeping flows. Physical Review Fluids, 2019, 4, .	1.0	8
11	A Weak Form Implementation of Nonlinear Axisymmetric Shell Equations With Examples. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	1.1	4
12	Curvature-Induced Instabilities of Shells. Physical Review Letters, 2018, 120, 048002.	2.9	53
13	Snapping of bistable, prestressed cylindrical shells. Europhysics Letters, 2018, 122, 64003.	0.7	17
14	Curvature-driven morphing of non-Euclidean shells. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20170087.	1.0	32
15	Geometry and mechanics of thin growing bilayers. Soft Matter, 2016, 12, 4435-4442.	1.2	72
16	Steady and transient analysis of anisotropic swelling in fibered gels. Journal of Applied Physics, 2015, 118, .	1.1	20
17	Mechanics of Bio–hybrid Systems. Procedia IUTAM, 2015, 12, 145-153.	1.2	0
18	Morphing of geometric composites via residual swelling. Soft Matter, 2015, 11, 5812-5820.	1.2	80

#	Article	IF	Citations
19	Anisotropic swelling of thin gel sheets. Soft Matter, 2015, 11, 1492-1499.	1.2	34
20	Actuation and buckling effects in IPMCs. , 2014, , .		1
21	Multiphysics of bio-hybrid systems: shape control and electro-induced motion. Smart Materials and Structures, 2014, 23, 045043.	1.8	7
22	Swelling-induced and controlled curving in layered gel beams. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20140467.	1.0	43
23	Curled actuated shapes of ionic polymer metal composites strips. Journal of Applied Physics, 2013, 113, .	1.1	28
24	Thermodynamically based multiphysic modeling of ionic polymer metal composites. Journal of Intelligent Material Systems and Structures, 2011, 22, 1887-1897.	1.4	66
25	Giant Displacements in IPMC-Based Structures: A Preliminary Study. Advanced Materials Research, 0, 745, 119-128.	0.3	1