Corrado Maurini

List of Publications by Year
in descending order

		236925	361022
38 papers	3,789 citations	25 h-index	35 g-index
39 all docs	39 docs citations	39 times ranked	1909 citing authors

#	Article	IF	Citations
1	Regularized formulation of the variational brittle fracture with unilateral contact: Numerical experiments. Journal of the Mechanics and Physics of Solids, 2009, 57, 1209-1229.	4.8	983
2	Gradient Damage Models and Their Use to Approximate Brittle Fracture. International Journal of Damage Mechanics, 2011, 20, 618-652.	4.2	450
3	Crack nucleation in variational phase-field models of brittle fracture. Journal of the Mechanics and Physics of Solids, 2018, 110, 80-99.	4.8	353
4	Morphogenesis and Propagation of Complex Cracks Induced by Thermal Shocks. Physical Review Letters, 2014, 112, 014301.	7.8	212
5	Automated Estimation of Collagen Fibre Dispersion in the Dermis and its Contribution to the Anisotropic Behaviour of Skin. Annals of Biomedical Engineering, 2012, 40, 1666-1678.	2.5	159
6	An overview of the modelling of fracture by gradient damage models. Meccanica, 2016, 51, 3107-3128.	2.0	133
7	The issues of the uniqueness and the stability of the homogeneous response in uniaxial tests with gradient damage models. Journal of the Mechanics and Physics of Solids, 2011, 59, 1163-1190.	4.8	124
8	Passive damping of beam vibrations through distributed electric networks and piezoelectric transducers: prototype design and experimental validation. Smart Materials and Structures, 2004, 13, 299-308.	3.5	110
9	Comparison of piezoelectronic networks acting as distributed vibration absorbers. Mechanical Systems and Signal Processing, 2004, 18, 1243-1271.	8.0	109
10	Linear and nonlinear solvers for variational phase-field models of brittle fracture. International Journal for Numerical Methods in Engineering, 2017, 109, 648-667.	2.8	109
11	Extension of the Eulerâ€"Bernoulli model of piezoelectric laminates to include 3D effects via a mixed approach. Computers and Structures, 2006, 84, 1438-1458.	4.4	94
12	Coupling damage and plasticity for a phase-field regularisation of brittle, cohesive and ductile fracture: One-dimensional examples. International Journal of Mechanical Sciences, 2018, 149, 559-576.	6.7	84
13	On a model of layered piezoelectric beams including transverse stress effect. International Journal of Solids and Structures, 2004, 41, 4473-4502.	2.7	78
14	Solid Drops: Large Capillary Deformations of Immersed Elastic Rods. Physical Review Letters, 2013, 111, 114301.	7.8	71
15	Initiation of a periodic array of cracks in the thermal shock problem: A gradient damage modeling. Journal of the Mechanics and Physics of Solids, 2014, 63, 256-284.	4.8	70
16	Numerical methods for modal analysis of stepped piezoelectric beams. Journal of Sound and Vibration, 2006, 298, 918-933.	3.9	62
17	Crack kinking in a variational phase-field model of brittle fracture with strongly anisotropic surface energy. Journal of the Mechanics and Physics of Solids, 2019, 125, 502-522.	4.8	62
18	Multiparameter actuation for shape control of bistable composite plates. International Journal of Solids and Structures, 2010, 47, 1449-1458.	2.7	57

#	Article	IF	Citations
19	Tristability of thin orthotropic shells with uniform initial curvature. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 2949-2966.	2.1	52
20	A variational model for fracture and debonding of thin films under in-plane loadings. Journal of the Mechanics and Physics of Solids, 2014, 70, 320-348.	4.8	49
21	Vibrations of post-buckled rods: The singular inextensible limit. Journal of Sound and Vibration, 2012, 331, 704-720.	3.9	43
22	Distributed piezoelectric actuation of a bistable buckled beam. European Journal of Mechanics, A/Solids, 2007, 26, 837-853.	3.7	42
23	Simple and extensible plate and shell finite element models through automatic code generation tools. Computers and Structures, 2018, 209, 163-181.	4.4	40
24	Crack patterns obtained by unidirectional drying of a colloidal suspension in a capillary tube: experiments and numerical simulations using a two-dimensional variational approach. International Journal of Fracture, 2013, 184, 75-91.	2.2	39
25	Identification of electromechanical modal parameters of linear piezoelectric structures. Smart Materials and Structures, 2007, 16, 323-331.	3.5	38
26	Nucleation under multi-axial loading in variational phase-field models of brittle fracture. International Journal of Fracture, 2022, 237, 61-81.	2.2	25
27	Fracture and debonding of a thin film on a stiff substrate: analytical and numerical solutions of a one-dimensional variational model. Continuum Mechanics and Thermodynamics, 2013, 25, 243-268.	2.2	24
28	Growth and shape control of disks by bending and extension. Journal of the Mechanics and Physics of Solids, 2013, 61, 190-204.	4.8	24
29	A gradient approach for the macroscopic modeling of superelasticity in softening shape memory alloys. International Journal of Solids and Structures, 2015, 52, 45-55.	2.7	24
30	Multi-parameter actuation of a neutrally stable shell: a flexible gear-less motor. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20170364.	2.1	24
31	Strain-gradient vs damage-gradient regularizations of softening damage models. Computer Methods in Applied Mechanics and Engineering, 2018, 340, 424-450.	6.6	20
32	On models of layered piezoelectric beams for passive vibration control. European Physical Journal Special Topics, 2004, 115, 307-316.	0.2	11
33	A neutrally stable shell in a Stokes flow: a rotational Taylor's sheet. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190178.	2.1	5
34	Numerical bifurcation and stability analysis of variational gradient-damage models for phase-field fracture. Journal of the Mechanics and Physics of Solids, 2021, 152, 104424.	4.8	5
35	<title>Distributed electric absorbers of beam vibrations</title>. , 2003, 5052, 230.		1
36	Modal analysis of stepped piezoelectric beams. , 2007, , .		1

#	Article	IF	Citations
37	On the identification of modal couplings and inherent capacitances of piezoelectric structures. , 2007, , .		1
38	Chaotic and regular dynamics of a morphing shell with a vanishing-stiffness mode. Extreme Mechanics Letters, 2022, 54, 101755.	4.1	1