Francesco Marotti de Sciarra

List of Publications by Year
in descending order

96	4,070	81839	123376
papers	citations	39 h-index	61 g-index

100	100	100	1178
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Constitutive boundary conditions and paradoxes in nonlocal elastic nanobeams. International Journal of Mechanical Sciences, 2017, 121, 151-156.	3.6	403
2	Free vibrations of Bernoulli-Euler nano-beams by the stress-driven nonlocal integral model. Composites Part B: Engineering, 2017, 123, 105-111.	5.9	202
3	Functionally graded Timoshenko nanobeams: A novel nonlocal gradient formulation. Composites Part B: Engineering, 2016, 100, 208-219.	5.9	192
4	Constitutive boundary conditions for nonlocal strain gradient elastic nano-beams. International Journal of Engineering Science, 2018, 130, 187-198.	2.7	136
5	Free vibrations of elastic beams by modified nonlocal strain gradient theory. International Journal of Engineering Science, 2018, 133, 99-108.	2.7	122
6	Stress-driven modeling of nonlocal thermoelastic behavior of nanobeams. International Journal of Engineering Science, 2018, 126, 53-67.	2.7	121
7	Application of an enhanced version of the Eringen differential model to nanotechnology. Composites Part B: Engineering, 2016, 96, 274-280.	5.9	98
8	Exact solutions of inflected functionally graded nano-beams in integral elasticity. Composites Part B: Engineering, 2018, 142, 273-286.	5.9	97
9	Stress-driven nonlocal integral model for Timoshenko elastic nano-beams. European Journal of Mechanics, A/Solids, 2018, 72, 275-286.	2.1	94
10	Closed-form solutions in stress-driven two-phase integral elasticity for bending of functionally graded nano-beams. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 97, 13-30.	1.3	93
11	Stress-driven nonlocal integral elasticity for axisymmetric nano-plates. International Journal of Engineering Science, 2019, 136, 38-52.	2.7	93
12	Variational nonlocal gradient elasticity for nano-beams. International Journal of Engineering Science, 2019, 143, 73-91.	2.7	84
13	A closed-form model for torsion of nanobeams with an enhanced nonlocal formulation. Composites Part B: Engineering, 2017, 108, 315-324.	5.9	83
14	Buckling loads of nano-beams in stress-driven nonlocal elasticity. Mechanics of Advanced Materials and Structures, 2020, 27, 869-875.	1.5	83
15	Stress-driven integral elastic theory for torsion of nano-beams. Mechanics Research Communications, 2018, 87, 35-41.	1.0	82
16	Variational formulations for functionally graded nonlocal Bernoulliâ€“Euler nanobeams. Composite Structures, 2015, 129, 80-89.	3.1	79
17	A stress-driven local-nonlocal mixture model for Timoshenko nano-beams. Composites Part B: Engineering, 2019, 164, 590-598.	5.9	75
18	Experimental evaluations and modeling of the tensile behavior of polypropylene/single-walled carbon nanotubes fibers. Composite Structures, 2017, 174, 12-18.	3.1	70

#	Article	IF	Citations
19	Application of gradient elasticity to armchair carbon nanotubes: Size effects and constitutive parameters assessment. European Journal of Mechanics, A/Solids, 2017, 65, 1-13.	2.1	68
20	Nonlocal strain gradient exact solutions for functionally graded inflected nano-beams. Composites Part B: Engineering, 2019, 164, 667-674.	5.9	68
21	A gradient Eringen model for functionally graded nanorods. Composite Structures, 2015, 131, 1124-1131.	3.1	67
22	Flexural properties of multi-wall carbon nanotube/polypropylene composites: Experimental investigation and nonlocal modeling. Composite Structures, 2015, 131, 282-289.	3.1	62
23	An Eringen-like model for Timoshenko nanobeams. Composite Structures, 2016, 139, 104-110.	3.1	62
24	Variationally consistent dynamics of nonlocal gradient elastic beams. International Journal of Engineering Science, 2020, 149, 103220.	2.7	62
25	Analogies between nonlocal and local Bernoulliâ€“Euler nanobeams. Archive of Applied Mechanics, 2015, 85, 89-99.	1.2	53
26	On functionally graded Timoshenko nonisothermal nanobeams. Composite Structures, 2016, 135, 286-296.	3.1	53
27	On nonlocal mechanics of curved elastic beams. International Journal of Engineering Science, 2019, 144, 103140.	2.7	53
28	A new nonlocal bending model for Eulerâ€“Bernoulli nanobeams. Mechanics Research Communications, 2014, 62, 25-30.	1.0	51
29	A Fully Gradient Model for Euler-Bernoulli Nanobeams. Mathematical Problems in Engineering, 2015, 2015, 1-8.	0.6	51
30	A gradient elasticity model of Bernoulliâ€“Euler nanobeams in non-isothermal environments. European Journal of Mechanics, A/Solids, 2016, 55, 243-255.	2.1	51
31	Nonlocal strain gradient torsion of elastic beams: variational formulation and constitutive boundary conditions. Archive of Applied Mechanics, 2020, 90, 691-706.	1.2	47
32	A Nonlocal Model for Carbon Nanotubes under Axial Loads. Advances in Materials Science and Engineering, 2013, 2013, 1-6.	1.0	46
33	A higher-order Eringen model for Bernoulliâ€“Euler nanobeams. Archive of Applied Mechanics, 2016, 86, 483-495.	1.2	46
34	Timoshenko nonlocal strain gradient nanobeams: Variational consistency, exact solutions and carbon nanotube Young moduli. Mechanics of Advanced Materials and Structures, 2021, 28, 1523-1536.	1.5	46
35	Finite element modelling of nonlocal beams. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 59, 144-149.	1.3	45
36	Small-scale effects in nanorods. Acta Mechanica, 2014, 225, 1945-1953.	1.1	43

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37	A nonlocal model with strain-based damage. International Journal of Solids and Structures, 2009, 46, 4107-4122.	1.3	42
38	Variational formulations and a consistent finite-element procedure for a class of nonlocal elastic continua. International Journal of Solids and Structures, 2008, 45, 4184-4202.	1.3	41
39	On non-local and non-homogeneous elastic continua. International Journal of Solids and Structures, 2009, 46, 651-676.	1.3	40
40	Modified Nonlocal Strain Gradient Elasticity for Nano-Rods and Application to Carbon Nanotubes. Applied Sciences (Switzerland), 2019, 9, 514.	1.3	39
41	Aifantis versus Lam strain gradient models of Bishop elastic rods. Acta Mechanica, 2019, 230, 2799-2812.	1.1	38
42	Hardening plasticity with nonlocal strain damage. International Journal of Plasticity, 2012, 34, 114-138.	4.1	37
43	A gradient model for Timoshenko nanobeams. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 62, 1-9.	1.3	37
44	On thermodynamic functions in thermoelasticity without energy dissipation. European Journal of Mechanics, A/Solids, 2014, 46, 84-95.	2.1	31
45	On the dynamics of nano-frames. International Journal of Engineering Science, 2021, 160, 103433.	2.7	30
46	Variational formulations, convergence and stability properties in nonlocal elastoplasticity. International Journal of Solids and Structures, 2008, 45, 2322-2354.	1.3	29
47	On torsion of nonlocal Lam strain gradient FG elastic beams. Composite Structures, 2020, 233, 111550.	3.1	29
48	Finite element method for stress-driven nonlocal beams. Engineering Analysis With Boundary Elements, 2022, 134, 22-34.	2.0	28
49	Nonlocal integral thermoelasticity: A thermodynamic framework for functionally graded beams. Composite Structures, 2019, 225, 111104.	3.1	27
50	Random vibrations of stress-driven nonlocal beams with external damping. Meccanica, 2021, 56, 1329-1344.	1.2	26
51	On thermomechanics of multilayered beams. International Journal of Engineering Science, 2020, 155, 103364.	2.7	25
52	A variational theory for finite-step elasto-plastic problems. International Journal of Solids and Structures, 1993, 30, 2317-2334.	1.3	24
53	Novel variational formulations for nonlocal plasticity. International Journal of Plasticity, 2009, 25, 302-331.	4.1	24
54	A general theory for nonlocal softening plasticity of integral-type. International Journal of Plasticity, 2008, 24, 1411-1439.	4.1	22

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55	A potential theory for monotone multivalued operators. Quarterly of Applied Mathematics, 1993, 51, 613-631.	0.5	21
56	An internal variable theory of inelastic behaviour derived from the uniaxial rigid-perfectly plastic law. International Journal of Engineering Science, 1993, 31, 1105-1120.	2.7	19
57	A consistent variational formulation of Bishop nonlocal rods. Continuum Mechanics and Thermodynamics, 2020, 32, 1311-1323.	1.4	18
58	On the regularity of curvature fields in stress-driven nonlocal elastic beams. Acta Mechanica, 2021, 232, 2595-2603.	1.1	18
59	Variational formulations of non-linear and non-smooth structural problems. International Journal of Non-Linear Mechanics, 1993, 28, 195-208.	1.4	17
60	Limit behaviour of Eringenâ€™s two-phase elastic beams. European Journal of Mechanics, A/Solids, 2021, 89, 104315.	2.1	16
61	Elastostatics of Bernoulliâ€“Euler Beams Resting on Displacement-Driven Nonlocal Foundation. Nanomaterials, 2021, 11, 573.	1.9	15
62	Wellâ€posedness and numerical performances of the strain gap method. International Journal for Numerical Methods in Engineering, 2001, 51, 103-126.	1.5	13
63	Analytical Solutions of Viscoelastic Nonlocal Timoshenko Beams. Mathematics, 2022, 10, 477.	1.1	13
64	Variational principles for a class of finite step elastoplastic problems with non-linear mixed hardening. Computer Methods in Applied Mechanics and Engineering, 1993, 109, 293-314.	3.4	12
65	A gradient model for torsion of nanobeams. Comptes Rendus - Mecanique, 2015, 343, 289-300.	2.1	12
66	Buckling of thin-walled beams with open and generically variable section. Computers and Structures, 1992, 44, 843-849.	2.4	11
67	Nonlocal and gradient rate plasticity. International Journal of Solids and Structures, 2004, 41, 7329-7349.	1.3	11
68	Dynamics of Stress-Driven Two-Phase Elastic Beams. Nanomaterials, 2021, 11, 1138.	1.9	11
69	Nano-beams under torsion: a stress-driven nonlocal approach. PSU Research Review, 2017, 1, 164-169.	1.3	10
70	On the nonlocal bending problem with fractional hereditariness. Meccanica, 2022, 57, 807-820.	1.2	10
71	General Theory of Damage Elastoplastic Models. Journal of Engineering Mechanics - ASCE, 1997, 123, 1003-1011.	1.6	9
72	A new variational theory and a computational algorithm for coupled elastoplastic damage models. International Journal of Solids and Structures, 1997, 34, 1761-1796.	1.3	9

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73	A Nonlocal Finite Element Approach to Nanobeams. Advances in Mechanical Engineering, 2013, 5, 720406.	0.8	8
74	Nonlocal Mechanical Behavior of Layered Nanobeams. Symmetry, 2020, 12, 717.	1.1	7
75	ON NONLOCAL LAM STRAIN GRADIENT MECHANICS OF ELASTIC RODS. International Journal for Multiscale Computational Engineering, 2020, 18, 67-81.	0.8	7
76	Automatic analysis of multicell thin-walled sections. Computers and Structures, 1996, 59, 641-655.	2.4	6
77	Mixed finite element formulations and related limitation principles: a general treatment. Computer Methods in Applied Mechanics and Engineering, 1996, 138, 105-130.	3.4	5
78	Dynamic behavior of nanobeams under axial loads: Integral elasticity modeling and sizeâ€dependent eigenfrequencies assessment. Mathematical Methods in the Applied Sciences, 0, , .	1.2	5
79	Stress-driven two-phase integral elasticity for Timoshenko curved beams. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanomaterials, Nanoengineering and Nanosystems, 2021, 235, 52-63.	0.5	4
80	Elasticity problems of beams on reaction-driven nonlocal foundation. Archive of Applied Mechanics, 0, , .	1.2	4
81	Nonlocal integral elasticity for third-order small-scale beams. Acta Mechanica, 2022, 233, 2393-2403.	1.1	4
82	The B-bar method and the limitation principles. International Journal of Solids and Structures, 1999, 36, 5177-5206.	1.3	3
83	Relations between enhanced strain methods and the HR method. Computer Methods in Applied Mechanics and Engineering, 2002, 191, 2661-2677.	3.4	2
84	Modulated Linear Dynamics of Functionally Graded Nanobeams With Nonlocal and Gradient Elasticity. , 2018, , 293-323.		2
85	Direct and dual theorems of castigliano and clapeyron for generalized elastic models. Acta Mechanica, 1997, 124, 107-130.	1.1	1
86	A nonlocal formulation of plasticity. , 2005, , 115-125.		1
87	Axial and flexional behaviour of elastic nano-beams by stress-driven two-phase elasticity. , 2019, , 480-485.		1
88	Authors' closure. International Journal of Solids and Structures, 1995, 32, 1479-1480.	1.3	0
89	Compatible mixed formulations for elastoplastic models. Mechanics Research Communications, 1996, 23, 339-348.	1.0	0
90	A consistent approach to continuum and discrete rate elastoplastic structural problems. Computer Methods in Applied Mechanics and Engineering, 1996, 137, 207-238.	3.4	0

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91	Some Variational Principles for Coupled Thermoelasticity. Journal of Engineering (United States), 2013, 2013, 1-8.	0.5	0
92	Exact solutions for a coupled nonlocal model of nanobeams. , 2014, , .		0
93	Mixed Variational Principles in Nondissipative Coupled Thermoelasticity. Advances in Mechanical Engineering, 2015, 6, 684075-684075.	0.8	0
94	On Stability for Elastoplasticity of Integral-Type. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 107-116.	0.1	0
95	A Nonlocal Model of Plasticity and Damage with Different Internal Lengths. Advanced Structured Materials, 2015, , 171-184.	0.3	0
96	Stress-Driven Approach for Stochastic Analysis of Noisy Nonlocal Beam. Lecture Notes in Mechanical Engineering, 2020, , 1670-1686.	0.3	0