Raffaele Barretta

List of Publications by Year
in descending order

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103 papers	5,643 citations	50244 46 h-index	82499 72 g-index
105 all docs	105 docs citations	105 times ranked	1226 citing authors

#	Article	IF	Citations
1	On the nonlocal bending problem with fractional hereditariness. Meccanica, 2022, 57, 807-820.	1.2	10
2	Finite element method for stress-driven nonlocal beams. Engineering Analysis With Boundary Elements, 2022, 134, 22-34.	2.0	28
3	Analytical Solutions of Viscoelastic Nonlocal Timoshenko Beams. Mathematics, 2022, 10, 477.	1.1	13
4	Multiscale Innovative Materials and Structures (MIMS). Nanomaterials, 2022, 12, 96.	1.9	0
5	Nonlocal integral elasticity for third-order small-scale beams. Acta Mechanica, 2022, 233, 2393-2403.	1.1	4
6	Random vibrations of stress-driven nonlocal beams with external damping. Meccanica, 2021, 56, 1329-1344.	1.2	26
7	Encyclopediaâ€"Open Access MDPI Journal. Encyclopedia, 2021, 1, 3-3.	2.4	0
8	On the dynamics of nano-frames. International Journal of Engineering Science, 2021, 160, 103433.	2.7	30
9	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
10	Elastostatics of Bernoulliâ€"Euler Beams Resting on Displacement-Driven Nonlocal Foundation. Nanomaterials, 2021, 11, 573.	1.9	15
11	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
12	Dynamics of Stress-Driven Two-Phase Elastic Beams. Nanomaterials, 2021, 11, 1138.	1.9	11
13	On the regularity of curvature fields in stress-driven nonlocal elastic beams. Acta Mechanica, 2021, 232, 2595-2603.	1.1	18
14	Limit behaviour of Eringenâ€™s two-phase elastic beams. European Journal of Mechanics, A/Solids, 2021, 89, 104315.	2.1	16
15	Buckling loads of nano-beams in stress-driven nonlocal elasticity. Mechanics of Advanced Materials and Structures, 2020, 27, 869-875.	1.5	83
16	On torsion of nonlocal Lam strain gradient FG elastic beams. Composite Structures, 2020, 233, 111550.	3.1	29
17	A consistent variational formulation of Bishop nonlocal rods. Continuum Mechanics and Thermodynamics, 2020, 32, 1311-1323.	1.4	18
18	Nonlocal strain gradient torsion of elastic beams: variational formulation and constitutive boundary conditions. Archive of Applied Mechanics, 2020, 90, 691-706.	1.2	47

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19	On thermomechanics of multilayered beams. International Journal of Engineering Science, 2020, 155, 103364.	2.7	25
20	Nonlocal Mechanical Behavior of Layered Nanobeams. Symmetry, 2020, 12, 717.	1.1	7
21	Variationally consistent dynamics of nonlocal gradient elastic beams. International Journal of Engineering Science, 2020, 149, 103220.	2.7	62
22	Stress-Driven Approach for Stochastic Analysis of Noisy Nonlocal Beam. Lecture Notes in Mechanical Engineering, 2020, , 1670-1686.	0.3	0
23	A stress-driven local-nonlocal mixture model for Timoshenko nano-beams. Composites Part B: Engineering, 2019, 164, 590-598.	5.9	75
24	On nonlocal mechanics of curved elastic beams. International Journal of Engineering Science, 2019, 144, 103140.	2.7	53
25	Variational nonlocal gradient elasticity for nano-beams. International Journal of Engineering Science, 2019, 143, 73-91.	2.7	84
26	Nonlocal integral thermoelasticity: A thermodynamic framework for functionally graded beams. Composite Structures, 2019, 225, 111104.	3.1	27
27	Aifantis versus Lam strain gradient models of Bishop elastic rods. Acta Mechanica, 2019, 230, 2799-2812.	1.1	38
28	Stress-driven nonlocal integral elasticity for axisymmetric nano-plates. International Journal of Engineering Science, 2019, 136, 38-52.	2.7	93
29	Modified Nonlocal Strain Gradient Elasticity for Nano-Rods and Application to Carbon Nanotubes. Applied Sciences (Switzerland), 2019, 9, 514.	1.3	39
30	Nonlocal strain gradient exact solutions for functionally graded inflected nano-beams. Composites Part B: Engineering, 2019, 164, 667-674.	5.9	68
31	Iterative methods for nonlocal elasticity problems. Continuum Mechanics and Thermodynamics, 2019, 31, 669-689.	1.4	16
32	Longitudinal vibrations of nano-rods by stress-driven integral elasticity. Mechanics of Advanced Materials and Structures, 2019, 26, 1307-1315.	1.5	103
33	Stress-driven two-phase integral elasticity for torsion of nano-beams. Composites Part B: Engineering, 2018, 145, 62-69.	5.9	65
34	Stress-driven modeling of nonlocal thermoelastic behavior of nanobeams. International Journal of Engineering Science, 2018, 126, 53-67.	2.7	121
35	Nonlocal integral elasticity in nanostructures, mixtures, boundary effects and limit behaviours. Continuum Mechanics and Thermodynamics, 2018, 30, 641-655.	1.4	75
36	Exact solutions of inflected functionally graded nano-beams in integral elasticity. Composites Part B: Engineering, 2018, 142, 273-286.	5.9	97

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37	On the role of control windows in continuum dynamics. Acta Mechanica, 2018, 229, 1849-1868.	1.1	2
38	Stress-driven nonlocal integral model for Timoshenko elastic nano-beams. European Journal of Mechanics, A/Solids, 2018, 72, 275-286.	2.1	94
39	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
40	A geometric rationale for invariance, covariance and constitutive relations. Continuum Mechanics and Thermodynamics, 2018, 30, 175-194.	1.4	7
41	Stress-driven integral elastic theory for torsion of nano-beams. Mechanics Research Communications, 2018, 87, 35-41.	1.0	82
42	Free vibrations of elastic beams by modified nonlocal strain gradient theory. International Journal of Engineering Science, 2018, 133, 99-108.	2.7	122
43	Nonlocal inflected nano-beams: A stress-driven approach of bi-Helmholtz type. Composite Structures, 2018, 200, 239-245.	3.1	71
44	Constitutive boundary conditions for nonlocal strain gradient elastic nano-beams. International Journal of Engineering Science, 2018, 130, 187-198.	2.7	136
45	Free vibrations of FG elastic Timoshenko nano-beams by strain gradient and stress-driven nonlocal models. Composites Part B: Engineering, 2018, 154, 20-32.	5.9	85
46	Modulated Linear Dynamics of Functionally Graded Nanobeams With Nonlocal and Gradient Elasticity. , 2018, , 293-323.		2
47	Stress-driven versus strain-driven nonlocal integral model for elastic nano-beams. Composites Part B: Engineering, 2017, 114, 184-188.	5.9	248
48	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
49	Experimental evaluations and modeling of the tensile behavior of polypropylene/single-walled carbon nanotubes fibers. Composite Structures, 2017, 174, 12-18.	3.1	70
50	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
51	Nonlocal elasticity in nanobeams: the stress-driven integral model. International Journal of Engineering Science, 2017, 115, 14-27.	2.7	308
52	On nonlocal integral models for elastic nano-beams. International Journal of Mechanical Sciences, 2017, 131-132, 490-499.	3.6	135
53	Nano-beams under torsion: a stress-driven nonlocal approach. PSU Research Review, 2017, 1, 164-169.	1.3	10
54	Constitutive boundary conditions and paradoxes in nonlocal elastic nanobeams. International Journal of Mechanical Sciences, 2017, 121, 151-156.	3.6	403

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55	Solidâ€“fluid interaction: a continuum mechanics assessment. Acta Mechanica, 2017, 228, 851-869.	1.1	2
56	A closed-form model for torsion of nanobeams with an enhanced nonlocal formulation. Composites Part B: Engineering, 2017, 108, 315-324.	5.9	83
57	Micromorphic continua: non-redundant formulations. Continuum Mechanics and Thermodynamics, 2016, 28, 1659-1670.	1.4	42
58	Application of an enhanced version of the Eringen differential model to nanotechnology. Composites Part B: Engineering, 2016, 96, 274-280.	5.9	98
59	Comment on the paper â€œExact solution of Eringenâ€™s nonlocal integral model for bending of Eulerâ€“Bernoulli and Timoshenko beamsâ€•by Meral Tuna & Mesut Kirca. International Journal of Engineering Science, 2016, 109, 240-242.	2.7	95
60	Functionally graded Timoshenko nanobeams: A novel nonlocal gradient formulation. Composites Part B: Engineering, 2016, 100, 208-219.	5.9	192
61	An Eringen-like model for Timoshenko nanobeams. Composite Structures, 2016, 139, 104-110.	3.1	62
62	On functionally graded Timoshenko nonisothermal nanobeams. Composite Structures, 2016, 135, 286-296.	3.1	53
63	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
64	A higher-order Eringen model for Bernoulliâ€“Euler nanobeams. Archive of Applied Mechanics, 2016, 86, 483-495.	1.2	46
65	A Fully Gradient Model for Euler-Bernoulli Nanobeams. Mathematical Problems in Engineering, 2015, 2015, 1-8.	0.6	51
66	Flexural properties of multi-wall carbon nanotube/polypropylene composites: Experimental investigation and nonlocal modeling. Composite Structures, 2015, 131, 282-289.	3.1	62
67	On torsion of random composite beams. Composite Structures, 2015, 132, 915-922.	3.1	58
68	Torsion of functionally graded nonlocal viscoelastic circular nanobeams. Composites Part B: Engineering, 2015, 72, 217-222.	5.9	86
69	A gradient model for torsion of nanobeams. Comptes Rendus - Mecanique, 2015, 343, 289-300.	2.1	12
70	A gradient Eringen model for functionally graded nanorods. Composite Structures, 2015, 131, 1124-1131.	3.1	67
71	Variational formulations for functionally graded nonlocal Bernoulliâ€“Euler nanobeams. Composite Structures, 2015, 129, 80-89.	3.1	79
72	Some closed-form solutions of functionally graded beams undergoing nonuniform torsion. Composite Structures, 2015, 123, 132-136.	3.1	54

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73	Analogies between Kirchhoff plates and functionally graded Saint-Venant beams under torsion. Continuum Mechanics and Thermodynamics, 2015, 27, 499-505.	1.4	62
74	Analogies between nonlocal and local Bernoulliâ€“Euler nanobeams. Archive of Applied Mechanics, 2015, 85, 89-99.	1.2	53
75	Some analytical solutions of functionally graded Kirchhoff plates. Composites Part B: Engineering, 2015, 68, 266-269.	5.9	63
76	Geometric continuum mechanics. Meccanica, 2014, 49, 111-133.	1.2	25
77	Analogies between Kirchhoff plates and Saint-Venant beams under flexure. Acta Mechanica, 2014, 225, 2075-2083.	1.1	36
78	Small-scale effects in nanorods. Acta Mechanica, 2014, 225, 1945-1953.	1.1	43
79	Rate formulations in nonlinear continuum mechanics. Acta Mechanica, 2014, 225, 1625-1648.	1.1	7
80	Exact solutions of isotropic viscoelastic functionally graded Kirchhoff plates. Composite Structures, 2014, 118, 448-454.	3.1	61
81	The geometry of nonlinear elasticity. Acta Mechanica, 2014, 225, 3199-3235.	1.1	17
82	A new nonlocal bending model for Eulerâ€“Bernoulli nanobeams. Mechanics Research Communications, 2014, 62, 25-30.	1.0	51
83	A gradient model for Timoshenko nanobeams. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 62, 1-9.	1.3	37
84	On stress function in Saint-Venant beams. Meccanica, 2013, 48, 1811-1816.	1.2	11
85	Analogies between Kirchhoff plates and Saint-Venant beams under torsion. Acta Mechanica, 2013, 224, 2955-2964.	1.1	39
86	On Eulerâ€™s stretching formula in continuum mechanics. Acta Mechanica, 2013, 224, 211-230.	1.1	15
87	On the shear centre in Saint-Venant beam theory. Mechanics Research Communications, 2013, 52, 52-56.	1.0	8
88	On CesÃro-Volterra Method in Orthotropic Saint-Venant Beam. Journal of Elasticity, 2013, 112, 233-253.	0.9	37
89	Geometric constitutive theory and frame invariance. International Journal of Non-Linear Mechanics, 2013, 51, 75-86.	1.4	17
90	A Nonlocal Model for Carbon Nanotubes under Axial Loads. Advances in Materials Science and Engineering, 2013, 2013, 1-6.	1.0	46

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91	On the relative position of twist and shear centres in the orthotropic and fiberwise homogeneous Saintâ€“Venant beam theory. International Journal of Solids and Structures, 2012, 49, 3038-3046.	1.3	43
92	On torsion and shear of Saint-Venant beams. European Journal of Mechanics, A/Solids, 2012, 35, 47-60.	2.1	57
93	Covariant hypo-elasticity. European Journal of Mechanics, A/Solids, 2011, 30, 1012-1023.	2.1	16
94	Variational Formulation of the First Principle of Continuum Thermodynamics. Continuum Mechanics and Thermodynamics, 2010, 22, 177-187.	1.4	30
95	Algorithmic tangent stiffness in elastoplasticity and elastoviscoplasticity: A geometric insight. Mechanics Research Communications, 2010, 37, 289-292.	1.0	18
96	Shear stresses in elastic beams: an intrinsic approach. European Journal of Mechanics, A/Solids, 2010, 29, 400-409.	2.1	15
97	On continuum dynamics. Journal of Mathematical Physics, 2009, 50, 102903.	0.5	9
98	On the general form of the law of dynamics. International Journal of Non-Linear Mechanics, 2009, 44, 689-695.	1.4	9
99	On Maupertuis principle in dynamics. Reports on Mathematical Physics, 2009, 63, 331-346.	0.4	16
100	Nonlinear shell theory: a duality approach. Journal of Mechanics of Materials and Structures, 2007, 2, 1207-1230.	0.4	11
101	On the theory of material inhomogeneities. Mechanics Research Communications, 2006, 33, 758-763.	1.0	4
102	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
103	Elasticity problems of beams on reaction-driven nonlocal foundation. Archive of Applied Mechanics, 0, , .	1.2	4