Francesco dell'Isola

List of Publications by Year
in descending order

225	12,048	16437 64	32815 100
papers	citations	h-index	g-index

233	233	233	2053
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Approximation of dissipative systems by elastic chains: Numerical evidence. Mathematics and Mechanics of Solids, 2023, 28, 501-520.	1.5	4
2	A numerical investigation on impulse-induced nonlinear longitudinal waves in pantographic beams. Mathematics and Mechanics of Solids, 2022, 27, 22-48.	1.5	17
3	Electrical analogs of curved beams and application to piezoelectric network damping. Mathematics and Mechanics of Solids, 2022, 27, 578-601.	1.5	19
4	On weak solutions of the boundary value problem within linear dilatational strain gradient elasticity for polyhedral Lipschitz domains. Mathematics and Mechanics of Solids, 2022, 27, 433-445.	1.5	10
5	The Study of the Genesis of Novel Mathematical and Mechanical Theories Provides an Inspiration for Future Original Research. Advanced Structured Materials, 2022, , 1-73.	0.3	4
6	Piola transformations in second-gradient continua. Mechanics Research Communications, 2022, 120, 103836.	1.0	18
7	On the elastic wedge problem within simplified and incomplete strain gradient elasticity theories. International Journal of Solids and Structures, 2022, 239-240, 111433.	1.3	18
8	On a hemi-variational formulation for a 2D elasto-plastic-damage strain gradient solid with granular microstructure. Mathematics in Engineering, 2022, 5, 1-24.	0.5	15
9	Second-gradient continua: From Lagrangian to Eulerian and back. Mathematics and Mechanics of Solids, 2022, 27, 2715-2750.	1.5	23
10	In-plane dynamic buckling of duoskelion beam-like structures: discrete modeling and numerical results. Mathematics and Mechanics of Solids, 2022, 27, 1164-1184.	1.5	11
11	Generalized beam model for the analysis of wave propagation with a symmetric pattern of deformation in planar pantographic sheets. Wave Motion, 2022, 113, 102986.	1.0	16
12	Commented translation of Erwin SchrÃ¶dingerâ€™s paper â€˜On the dynamics of elastically coupled point systemsâ€™ (Zur Dynamik elastisch gekoppelter Punktsysteme). Mathematics and Mechanics of Solids, 2021, 26, 133-147.	1.5	12
13	Multiscale DIC Applied to Pantographic Structures. Experimental Mechanics, 2021, 61, 431-443.	1.1	33
14	On the validation of homogenized modeling for bi-pantographic metamaterials via digital image correlation. International Journal of Solids and Structures, 2021, 208-209, 49-62.	1.3	38
15	An implicit <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e3758" altimg="si145.svg"><mml:msup><mml:mrow><mml:mi mathvariant="normal">G</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msup></mml:math>-conforming bi-cubic interpolation for the analysis of smooth and folded Kirchhoffâ€“Love shell assemblies. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113476.	6.8	14
16	Equilibria determination of elastic articulated duoskelion beams in 2D via a Riks-type algorithm. International Journal of Non-Linear Mechanics, 2021, 128, 103628.	1.4	36
17	Multiphysics Modeling and Numerical Simulation in Computer-Aided Manufacturing Processes. Metals, 2021, 11, 175.	1.0	5
18	Investigating the mechanical response of microscale pantographic structures fabricated by multiphoton lithography. Extreme Mechanics Letters, 2021, 43, 101202.	2.0	22

#	Article	IF	Citations
19	On nonlinear dilatational strain gradient elasticity. Continuum Mechanics and Thermodynamics, 2021, 33, 1429-1463.	1.4	26
20	Greenâ€™s functions and integral representation of generalized continua: the case of orthogonal pantographic lattices. Zeitschrift Fur Angewandte Mathematik Und Physik, 2021, 72, 1.	0.7	2
21	Two layers pantographs: A 2D continuum model accounting for the beamsâ€™ offset and relative rotations as averages in SO(3) Lie groups. International Journal of Solids and Structures, 2021, 216, 43-58.	1.3	24
22	Identification of a geometrically nonlinear micromorphic continuum via granular micromechanics. Zeitschrift Fur Angewandte Mathematik Und Physik, 2021, 72, 1.	0.7	29
23	Poynting effects in pantographic metamaterial captured via multiscale DVC. Journal of Strain Analysis for Engineering Design, 2021, 56, 462-477.	1.0	22
24	A non-linear symmetric <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1242" altimg="si456.svg"><mml:msup><mml:mrow><mml:mi mathvariant="normal">G</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msup></mml:math>-conforming BÃ©zier finite element formulation for the analysis of Kirchhoff beam assemblies. Computer Methods in Applied Mechanics and Engineering, 2021, 387, 114176.	3.4	17
25	An implicit strong $$mathrm {G}^{1}$$-conforming formulation for the analysis of the Kirchhoff plate model. Continuum Mechanics and Thermodynamics, 2020, 32, 621-645.	1.4	13
26	Heuristic Homogenization of Euler and Pantographic Beams. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2020, , 123-155.	0.3	15
27	A continual model of a damaged medium used for analyzing fatigue life of polycrystalline structural alloys under thermalâ€“mechanical loading. Continuum Mechanics and Thermodynamics, 2020, 32, 229-245.	1.4	13
28	Two-dimensional continua capable of large elastic extension in two independent directions: Asymptotic homogenization, numerical simulations and experimental evidence. Mechanics Research Communications, 2020, 103, 103466.	1.0	35
29	Large in-plane elastic deformations of bi-pantographic fabrics: asymptotic homogenization and experimental validation. Mathematics and Mechanics of Solids, 2020, 25, 739-767.	1.5	72
30	Dynamic Testing of Lime-Tree (Tilia Europoea) and Pine (Pinaceae) for Wood Model Identification. Materials, 2020, 13, 5261.	1.3	5
31	On the well posedness of static boundary value problem within the linear dilatational strain gradient elasticity. Zeitschrift Fur Angewandte Mathematik Und Physik, 2020, 71, 1.	0.7	29
32	Three-point bending test of pantographic blocks: numerical and experimental investigation. Mathematics and Mechanics of Solids, 2020, 25, 1965-1978.	1.5	49
33	On rotational instability within the nonlinear six-parameter shell theory. International Journal of Solids and Structures, 2020, 196-197, 179-189.	1.3	23
34	Chirality in 2D Cosserat media related to stretch-micro-rotation coupling with links to granular micromechanics. International Journal of Solids and Structures, 2020, 202, 28-38.	1.3	53
35	A Review of Some Selected Examples of Mechanical and Acoustic Metamaterials. , 2020, , 52-102.		0
36	Experimental Methods in Pantographic Structures. , 2020, , 263-297.		9

#	Article	IF	Citations
37	Least Action and Virtual Work Principles for the Formulation of Generalized Continuum Models. , 2020, , 327-394.		16
38	Pantographic Metamaterial: A (Not So) Particular Case. , 2020, , 103-138.		3
39	Metamaterials: What Is Out There and What Is about to Come. , 2020, , 3-51.		1
40	Naive Model Theory: Its Applications to the Theory of Metamaterials Design. , 2020, , 141-196.		5
41	Lagrangian Discrete Models: Applications to Metamaterials. , 2020, , 197-262.		4
42	Variational Methods as Versatile Tools in Multidisciplinary Modeling and Computation. , 2020, , 298-326.		0
43	An iso-parametric $$pmb {mathrm {G}^1}$$-conforming finite element for the nonlinear analysis of Kirchhoff rod. Part I: the 2D case. Continuum Mechanics and Thermodynamics, 2020, 32, 1473-1496.	1.4	41
44	Isogeometric analysis of fiber reinforced composites using Kirchhoffâ€“Love shell elements. Computer Methods in Applied Mechanics and Engineering, 2020, 362, 112845.	3.4	43
45	Reduced Linear Constrained Elastic and Viscoelastic Homogeneous Cosserat Media as Acoustic Metamaterials. Symmetry, 2020, 12, 521.	1.1	12
46	A Lagrangian Hencky-type non-linear model suitable for metamaterials design of shearable and extensible slender deformable bodies alternative to Timoshenko theory. International Journal of Non-Linear Mechanics, 2020, 123, 103481.	1.4	63
47	Weak Solutions within the Gradient-Incomplete Strain-Gradient Elasticity. Lobachevskii Journal of Mathematics, 2020, 41, 1992-1998.	0.1	10
48	Application of modified Durbunâ€™s algorithm in solving poroelastodynamic problems via boundary element method. AIP Conference Proceedings, 2020, , .	0.3	0
49	Higher Gradient Theories and Their Foundations. , 2020, , 1090-1099.		0
50	Levi-Civita, Tullio. , 2020, , 1457-1467.		0
51	Lagrange Multipliers in Infinite Dimensional Spaces, Examples of Application. , 2020, , 1425-1432.		2
52	Generalized Contact Actions. , 2020, , 1033-1041.		0
53	Piola, Gabrio. , 2020, , 2021-2030.		0
54	Pantographic metamaterials: an example of mathematically driven design and of its technological challenges. Continuum Mechanics and Thermodynamics, 2019, 31, 851-884.	1.4	272

#	Article	IF	Citations
55	Pantographic beam: a complete second gradient 1D-continuum in plane. Zeitschrift Fur Angewandte Mathematik Und Physik, 2019, 70, 1.	0.7	63
56	Two new triangular <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e2753" altimg="si6.svg"><mml:msup><mml:mrow><mml:mi mathvariant="normal">G</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msup></mml:math>-conforming finite elements with cubic edge rotation for the analysis of Kirchhoff plates. Computer Methods in Applied Mechanics and Engineering, 2019, 356, 354-386.	3.4	24
57	Dynamics of taut strings undergoing large changes of tension caused by a force-driven traveling mass. Journal of Sound and Vibration, 2019, 458, 320-333.	2.1	11
58	On existence and uniqueness of weak solutions for linear pantographic beam lattices models. Continuum Mechanics and Thermodynamics, 2019, 31, 1843-1861.	1.4	35
59	Continuum theory for mechanical metamaterials with a cubic lattice substructure. Mathematics and Mechanics of Complex Systems, 2019, 7, 75-98.	0.5	70
60	Advances in pantographic structures: design, manufacturing, models, experiments and image analyses. Continuum Mechanics and Thermodynamics, 2019, 31, 1231-1282.	1.4	212
61	On mechanically driven biological stimulus for bone remodeling as a diffusive phenomenon. Biomechanics and Modeling in Mechanobiology, 2019, 18, 1639-1663.	1.4	66
62	Forceâ€“displacement relationship in micro-metric pantographs: Experiments and numerical simulations. Comptes Rendus - Mecanique, 2019, 347, 397-405.	2.1	50
63	Parametric Experimentation on Pantographic Unit Cells Reveals Local Extremum Configuration. Experimental Mechanics, 2019, 59, 927-939.	1.1	36
64	A nonlinear Lagrangian particle model for grains assemblies including grain relative rotations. International Journal for Numerical and Analytical Methods in Geomechanics, 2019, 43, 1051-1079.	1.7	55
65	Large deformations of Timoshenko and Euler beams under distributed load. Zeitschrift Fur Angewandte Mathematik Und Physik, 2019, 70, 1.	0.7	11
66	Estimating Fatigue Related Damage in Alloys under Block-type Non-symmetrical Low-cycle Loading. Advanced Structured Materials, 2019, , 81-92.	0.3	5
67	Edge effects in Hypar nets. Comptes Rendus - Mecanique, 2019, 347, 114-123.	2.1	10
68	A quadrilateral<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml196" display="inline" overflow="scroll" altimg="si196.gif"><mml:msup><mml:mrow><mml:mi mathvariant="normal">G</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msup></mml:math>-conforming finite element for the Kirchhoff plate model. Computer Methods in Applied Mechanics and Engineering, 2019, 346, 913-951.	3.4	27
69	A Multi-disciplinary Approach for Mechanical Metamaterial Synthesis: A Hierarchical Modular Multiscale Cellular Structure Paradigm. Advanced Structured Materials, 2019, , 485-505.	0.3	36
70	Extensible Beam Models in Large Deformation Under Distributed Loading: A Numerical Study on Multiplicity of Solutions. Advanced Structured Materials, 2019, , 19-41.	0.3	5
71	Introductory remarks about the Volume II of the Complete Works of Gabrio Piola. Advanced Structured Materials, 2019, , 1-22.	0.3	2
72	Lagrange Multipliers in Infinite Dimensional Spaces, Examples of Application. , 2019, , 1-8.		17

#	Article	IF	Citations
73	Levi-Civita, Tullio. , 2019, , 1-11.		1
74	Pantographic metamaterials show atypical Poynting effect reversal. Mechanics Research Communications, 2018, 89, 6-10.	1.0	87
75	Some Introductory and Historical Remarks on Mechanics of Microstructured Materials. Advanced Structured Materials, 2018, , 1-20.	0.3	7
76	A 1D Continuum Model for Beams with Pantographic Microstructure: Asymptotic Micro-Macro Identification and Numerical Results. Advanced Structured Materials, 2018, , 43-74.	0.3	38
77	Large deformations of 1D microstructured systems modeled as generalized Timoshenko beams. Zeitschrift Fur Angewandte Mathematik Und Physik, 2018, 69, 1.	0.7	18
78	A reconstructed local <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml210" display="inline" overflow="scroll" altimg="si31.gif"><mml:mover accent="true"><mml:mrow><mml:mi>B</mml:mi></mml:mrow><mml:mrow><mml:mo>ì„</mml:mo></mml:mrow></mml:mover></mm formulation for isogeometric Kirchhoffâ€“Love shells. Computer Methods in Applied Mechanics and Engineering, 2018, 332, 462-487.	3.4	69
79	Higher Gradient Theories and Their Foundations. , 2018, , 1-10.		1
80	A Note on Reduced Strain Gradient Elasticity. Advanced Structured Materials, 2018, , 301-310.	0.3	19
81	Exegesis of Sect. II and III.A from â€œFundamentals of the Mechanics of Continuaâ€•by E. Hellinger. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2018, 98, 31-68.	0.9	42
82	Exegesis of Sect. III.B from â€œFundamentals of the Mechanics of Continuaâ€•by E. Hellinger. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2018, 98, 69-105.	0.9	36
83	Linear Pantographic Sheets: Existence and Uniqueness of Weak Solutions. Journal of Elasticity, 2018, 132, 175-196.	0.9	115
84	Axisymmetric deformations of a 2nd grade elastic cylinder. Mechanics Research Communications, 2018, 94, 45-48.	1.0	28
85	Enhanced Piolaâ€“Hencky discrete models for pantographic sheets with pivots without deformation energy: Numerics and experiments. International Journal of Solids and Structures, 2018, 147, 94-109.	1.3	100
86	Wrinkling in engineering fabrics: a comparison between two different comprehensive modelling approaches. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20180063.	1.0	65
87	Piola, Gabrio. , 2018, , 1-10.		0
88	Generalized Contact Actions. , 2018, , 1-9.		1
89	Higher-gradient continua: The legacy of Piola, Mindlin, Sedov and Toupin and some future research perspectives. Mathematics and Mechanics of Solids, 2017, 22, 852-872.	1.5	188
90	The bias-extension test for the analysis of in-plane shear properties of textile composite reinforcements and prepregs: a review. International Journal of Material Forming, 2017, 10, 473-492.	0.9	152

#	Article	IF	Citations
91	Viscous second gradient porous materials for bones reconstructed with bio-resorbable grafts. Extreme Mechanics Letters, 2017, 13, 141-147.	2.0	81
92	Dynamics of 1D nonlinear pantographic continua. Nonlinear Dynamics, 2017, 88, 21-31.	2.7	61
93	Equilibria of a clamped Euler beam (Elastica) with distributed load: Large deformations. Mathematical Models and Methods in Applied Sciences, 2017, 27, 1391-1421.	1.7	33
94	â€œFastâ€•and â€œslowâ€•pressure waves electrically induced by nonlinear coupling in Biot-type porous medium saturated by a nematic liquid crystal. Zeitschrift Fur Angewandte Mathematik Und Physik, 2017, 68, 1.	0.7	14
95	Theory and computation of higher gradient elasticity theories based on action principles. Archive of Applied Mechanics, 2017, 87, 1495-1510.	1.2	127
96	Qualitative pivot damage analysis in aluminum printed pantographic sheets: Numerics and experiments. Mechanics Research Communications, 2017, 83, 47-52.	1.0	125
97	Linear pantographic sheets: Asymptotic micro-macro models identification. Mathematics and Mechanics of Complex Systems, 2017, 5, 127-162.	0.5	161
98	King post truss as a motif for internal structure of (meta)material with controlled elastic properties. Royal Society Open Science, 2017, 4, 171153.	1.1	65
99	An efficient blended mixed B-spline formulation for removing membrane locking in plane curved Kirchhoff rods. Computer Methods in Applied Mechanics and Engineering, 2017, 324, 476-511.	3.4	59
100	Bias extension test for pantographic sheets: numerical simulations based on second gradient shear energies. Journal of Engineering Mathematics, 2017, 103, 127-157.	0.6	82
101	First versus second gradient energies for planar sheets with two families of inextensible fibres: Investigation on deformation boundary layers, discontinuities and geometrical instabilities. Composites Part B: Engineering, 2017, 115, 423-448.	5.9	71
102	Exegesis of the Introduction and Sect.Âl from â€œFundamentals of the Mechanics of Continuaâ€^{**} by E. Hellinger. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2017, 97, 477-506.	0.9	63
103	Metamaterials and Smart Structures in a Big Data Era. Advances in Materials Science and Engineering, 2017, 2017, 1-1.	1.0	0
104	Lucio Russo: A multifaceted life. Mathematics and Mechanics of Complex Systems, 2016, 4, 197-198.	0.5	0
105	Against the Fragmentation of Knowledge: The Power of Multidisciplinary Research for the Design of Metamaterials. Advanced Structured Materials, 2016, , 523-545.	0.3	20
106	Some Cases of Unrecognized Transmission of Scientific Knowledge: From Antiquity to Gabrio Piolaâ€™s Peridynamics and Generalized Continuum Theories. Advanced Structured Materials, 2016, , 77-128.	0.3	42
107	Fiber rupture in sheared planar pantographic sheets: Numerical and experimental evidence. Mechanics Research Communications, 2016, 76, 86-90.	1.0	93
108	Numerical simulations of classical problems in two-dimensional (non) linear second gradient elasticity. International Journal of Engineering Science, 2016, 108, 34-50.	2.7	112

#	Article	IF	Citations
109	Hencky-type discrete model for pantographic structures: numerical comparison with second gradient continuum models. Zeitschrift Fur Angewandte Mathematik Und Physik, 2016, 67, 1.	0.7	188
110	Simplified analysis of a generalized bias test for fabrics with two families of inextensible fibres. Zeitschrift Fur Angewandte Mathematik Und Physik, 2016, 67, 1.	0.7	49
111	Minimization of Shear Energy in Two Dimensional Continua with Two Orthogonal Families of Inextensible Fibers: The Case of Standard Bias Extension Test. Journal of Elasticity, 2016, 122, 131-155.	0.9	29
112	An isogeometric implicit <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:msup><mml:mrow><mml:mi>G</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn> mixed finite element for Kirchhoff space rods. Computer Methods in Applied Mechanics and Engineering, 2016, 298, 325-349.	3.4	112
113	Buckling modes in pantographic lattices. Comptes Rendus - Mecanique, 2016, 344, 487-501.	2.1	75
114	Pantographic 2D sheets: Discussion of some numerical investigations and potential applications. International Journal of Non-Linear Mechanics, 2016, 80, 200-208.	1.4	60
115	A special issue in honor of Prof. David Steigmann. Continuum Mechanics and Thermodynamics, 2016, 28, 1-3.	1.4	1
116	Cauchy Tetrahedron Argument Applied to Higher Contact Interactions. Archive for Rational Mechanics and Analysis, 2016, 219, 1305-1341.	1.1	66
117	A visco-poroelastic model of functional adaptation in bones reconstructed with bio-resorbable materials. Biomechanics and Modeling in Mechanobiology, 2016, 15, 1325-1343.	1.4	94
118	Large deformations of planar extensible beams and pantographic lattices: heuristic homogenization, experimental and numerical examples of equilibrium. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20150790.	1.0	262
119	Referential description of the evolution of a 2D swarm of robots interacting with the closer neighbors: Perspectives of continuum modeling via higher gradient continua. International Journal of Non-Linear Mechanics, 2016, 80, 209-220.	1.4	33
120	Plane bias extension test for a continuum with two inextensible families of fibers: A variational treatment with Lagrange multipliers and a perturbation solution. International Journal of Solids and Structures, 2016, 81, 1-12.	1.3	86
121	Macroscopic Description of Microscopically Strongly Inhomogenous Systems: A Mathematical Basis for the Synthesis of Higher Gradients Metamaterials. Archive for Rational Mechanics and Analysis, 2015, 218, 1239-1262.	1.1	126
122	Wave propagation in pantographic 2D lattices with internal discontinuities. Proceedings of the Estonian Academy of Sciences, 2015, 64, 325.	0.9	24
123	Elastic pantographic 2D lattices: a numerical analysis on the static response and wave propagation. Proceedings of the Estonian Academy of Sciences, 2015, 64, 219.	0.9	69
124	The postulations Ã¡ la Dâ€™Alembert and Ã¡ la Cauchy for higher gradient continuum theories are equivalent: a review of existing results. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20150415.	1.0	101
125	Synthesis of Fibrous Complex Structures: Designing Microstructure to Deliver Targeted Macroscale Response. Applied Mechanics Reviews, 2015, 67, .	4.5	101
126	Continuum and discrete models for structures including (quasi-) inextensible elasticae with a view to the design and modeling of composite reinforcements. International Journal of Solids and Structures, 2015, 59, 1-17.	1.3	70

#	Article	IF	Citations
127	Mechanical response of fabric sheets to three-dimensional bending, twisting, and stretching. Acta Mechanica Sinica/Lixue Xuebao, 2015, 31, 373-382.	1.5	138
128	Thick fibrous composite reinforcements behave as special second-gradient materials: three-point bending of 3D interlocks. Zeitschrift Fur Angewandte Mathematik Und Physik, 2015, 66, 2041-2060.	0.7	48
129	Models to detect scientific creativity: Why something simpler than FrÃ©chet Metric Manifolds?. Mathematics and Mechanics of Solids, 2015, 20, 1146-1149.	1.5	2
130	Designing a light fabric metamaterial being highly macroscopically tough under directional extension: first experimental evidence. Zeitschrift Fur Angewandte Mathematik Und Physik, 2015, 66, 3473-3498.	0.7	157
131	At the origins and in the vanguard of peridynamics, non-local and higher-gradient continuum mechanics: An underestimated and still topical contribution of Gabrio Piola. Mathematics and Mechanics of Solids, 2015, 20, 887-928.	1.5	362
132	Pattern formation in the three-dimensional deformations of fibered sheets. Mechanics Research Communications, 2015, 69, 164-171.	1.0	74
133	Homogenization Ã la Piola produces second gradient continuum models for linear pantographic lattices. International Journal of Engineering Science, 2015, 97, 148-172.	2.7	191
134	Analytical continuum mechanics Ã la Hamiltonâ€“Piola least action principle for second gradient continua and capillary fluids. Mathematics and Mechanics of Solids, 2015, 20, 375-417.	1.5	212
135	Consistent tangent operator for an exact Kirchhoff rod model. Continuum Mechanics and Thermodynamics, 2015, 27, 861-877.	1.4	59
136	A Two-Dimensional Gradient-Elasticity Theory for Woven Fabrics. Journal of Elasticity, 2015, 118, 113-125.	0.9	166
137	GÃ©rard A. Maugin: engineering scientist. Celebrating his 70th anniversary. Archive of Applied Mechanics, 2014, 84, 1221-1227.	1.2	2
138	An implicit multi patch B-spline interpolation for Kirchhoffâ€“Love space rod. Computer Methods in Applied Mechanics and Engineering, 2014, 269, 173-197.	3.4	158
139	Modeling the onset of shear boundary layers in fibrous composite reinforcements by second-gradient theory. Zeitschrift Fur Angewandte Mathematik Und Physik, 2014, 65, 587-612.	0.7	117
140	A procedure for the static analysis of cable structures following elastic catenary theory. International Journal of Solids and Structures, 2014, 51, 1521-1533.	1.3	63
141	Second Gradient and Generalized Continua. A workshop held on 12â€“16 March 2012 in Cisterna di Latina. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2014, 94, 367-372.	0.9	4
142	Least Action Principle for Second Gradient Continua and Capillary Fluids: A Lagrangian Approach Following Piolaâ€™s Point of View. Advanced Structured Materials, 2014, , 606-694.	0.3	9
143	A Still Topical Contribution of Gabrio Piola to Continuum Mechanics: The Creation of Peri-dynamics, Non-local and Higher Gradient Continuum Mechanics. Advanced Structured Materials, 2014, , 696-750.	0.3	4
144	Gianpietro Del Piero: a scientist on the edge between engineering sciences and functional analysis. Continuum Mechanics and Thermodynamics, 2013, 25, 109-110.	1.4	0

#	Article	IF	Citations
145	Gianpietro Del Piero: a continuator of the Italian tradition in continuum mechanics, as started by Gabrio Piola. Continuum Mechanics and Thermodynamics, 2013, 25, 111-112.	1.4	0
146	Geometrically nonlinear higher-gradient elasticity with energetic boundaries. Journal of the Mechanics and Physics of Solids, 2013, 61, 2381-2401.	2.3	179
147	A continuum model for deformable, second gradient porous media partially saturated with compressible fluids. Journal of the Mechanics and Physics of Solids, 2013, 61, 2196-2211.	2.3	96
148	B-Spline interpolation of Kirchhoff-Love space rods. Computer Methods in Applied Mechanics and Engineering, 2013, 256, 251-269.	3.4	211
149	How contact interactions may depend on the shape of Cauchy cuts in Nth gradient continua: approach â€œÃ la Dâ€™Alembertâ€• Zeitschrift Fur Angewandte Mathematik Und Physik, 2012, 63, 1119-1141.	0.7	228
150	Linear plane wave propagation and normal transmission and reflection at discontinuity surfaces in second gradient 3D continua. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2012, 92, 52-71.	0.9	122
151	A mixture model with evolving mass densities for describing synthesis and resorption phenomena in bones reconstructed with bioâ€resorbable materials. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2012, 92, 426-444.	0.9	115
152	On the force density method for slack cable nets. International Journal of Solids and Structures, 2012, 49, 1526-1540.	1.3	38
153	Beyond Euler-Cauchy Continua: The structure of contact actions in N-th gradient generalized continua: a generalization of the Cauchy tetrahedron argument. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2011, , 17-106.	0.3	12
154	A continuum model for the bio-mechanical interactions between living tissue and bio-resorbable graft after bone reconstructive surgery. Comptes Rendus - Mecanique, 2011, 339, 625-640.	2.1	71
155	Linear elastic trusses leading to continua with exotic mechanical interactions. Journal of Physics: Conference Series, 2011, 319, 012018.	0.3	147
156	â€œHypertractions and hyperstresses convey the same mechanical information Continuum Mech. Thermodyn. (2010) 22:163â€“176â€•by Prof. Podio Guidugli and Prof. Vianello and some related papers on higher gradient theories. Continuum Mechanics and Thermodynamics, 2011, 23, 473-478.	1.4	13
157	A low-power circuit for piezoelectric vibration control by synchronized switching on voltage sources. Sensors and Actuators A: Physical, 2010, 161, 245-255.	2.0	60
158	Control of sound radiation and transmission by a piezoelectric plate with an optimized resistive electrode. European Journal of Mechanics, A/Solids, 2010, 29, 859-870.	2.1	58
159	Generalized Hooke's law for isotropic second gradient materials. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2009, 465, 2177-2196.	1.0	194
160	Boundary conditions at fluid-permeable interfaces in porous media: A variational approach. International Journal of Solids and Structures, 2009, 46, 3150-3164.	1.3	137
161	Variational formulation of pre-stressed solidâ€“fluid mixture theory, with an application to wave phenomena. European Journal of Mechanics, A/Solids, 2008, 27, 582-606.	2.1	82
162	Damage Detection with Auxiliary Subsystem. Advances in Science and Technology, 2008, 56, 401-413.	0.2	1

#	Article	IF	Citations
163	A variational deduction of second gradient poroelasticity I: general theory. Journal of Mechanics of Materials and Structures, 2008, 3, 507-526.	0.4	78
164	A variational deduction of second gradient poroelasticity II: an application to the consolidation problem. Journal of Mechanics of Materials and Structures, 2008, 3, 607-625.	0.4	49
165	Second gradient poromechanics. International Journal of Solids and Structures, 2007, 44, 6607-6629.	1.3	131
166	Extension of the Eulerâ€“Bernoulli model of piezoelectric laminates to include 3D effects via a mixed approach. Computers and Structures, 2006, 84, 1438-1458.	2.4	94
167	Multimode vibration suppression with passive two-terminal distributed network incorporating piezoceramic transducers. International Journal of Solids and Structures, 2005, 42, 3115-3132.	1.3	35
168	A passive electric controller for multimodal vibrations of thin plates. Computers and Structures, 2005, 83, 1236-1250.	2.4	58
169	Second-order solution of Saint-Venant's problem for an elastic bar predeformed in flexure. International Journal of Non-Linear Mechanics, 2005, 40, 411-422.	1.4	17
170	Structural-Damage Detection by Distributed Piezoelectric Transducers and Tuned Electric Circuits. Research in Nondestructive Evaluation, 2005, 16, 101-118.	0.5	12
171	Dilatational and Compacting Behavior around a Cylindrical Cavern Leachedâ€‰Out in a Solidâ€“Fluid Elastic Rock Salt. International Journal of Geomechanics, 2005, 5, 233-243.	1.3	16
172	A Second Gradient Model for Deformable Porous Matrices Filled with an Inviscid Fluid. , 2005, , 221-229.		4
173	On models of layered piezoelectric beams for passive vibration control. European Physical Journal Special Topics, 2004, 115, 307-316.	0.2	11
174	Multimodal beam vibration damping exploiting PZT transducers and passive distributed circuits. European Physical Journal Special Topics, 2004, 115, 323-330.	0.2	4
175	Piezoelectric Passive Distributed Controllers for Beam Flexural Vibrations. JVC/Journal of Vibration and Control, 2004, 10, 625-659.	1.5	116
176	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.	1.8	110
177	Comparison of piezoelectronic networks acting as distributed vibration absorbers. Mechanical Systems and Signal Processing, 2004, 18, 1243-1271.	4.4	109
178	Circuit analog of a beam and its application to multimodal vibration damping, using piezoelectric transducers. International Journal of Circuit Theory and Applications, 2004, 32, 167-198.	1.3	77
179	Piezo-ElectroMechanical (PEM) Kirchhoffâ€“Love plates. European Journal of Mechanics, A/Solids, 2004, 23, 689-702.	2.1	75
180	On a model of layered piezoelectric beams including transverse stress effect. International Journal of Solids and Structures, 2004, 41, 4473-4502.	1.3	78

#	Article	IF	Citations
181	Static Deformations of a Linear Elastic Porous Body Filled with an Inviscid Fluid. Journal of Elasticity, 2003, 72, 99-120.	0.9	16
182	Purely electrical damping of vibrations in arbitrary PEM plates: a mixed non-conforming FEM-Runge-Kutta time evolution analysis. Archive of Applied Mechanics, 2003, 73, 26-48.	1.2	10
183	An Eshelbian approach to the nonlinear mechanics of constrained solid-fluid mixtures. Acta Mechanica, 2003, 160, 45-60.	1.1	57
184	Piezo-ElectroMechanical (PEM) structures: passive vibration control using distributed piezoelectric transducers. Comptes Rendus - Mecanique, 2003, 331, 69-76.	2.1	42
185	Truss Modular Beams with Deformation Energy Depending on Higher Displacement Gradients. Mathematics and Mechanics of Solids, 2003, 8, 51-73.	1.5	433
186	Piezoelectromechanical structures: a survey of basic concepts and methodologies. , 2003, , .		4
187	<title>A novel passive electric network analog to Kirchhoff-Love plate designed to efficiently damp forced vibrations by distributed piezoelectric tranducers</title>. , 2003, , .		1
188	<title>Piezoelectromechanical structures: new trends towards the multimodal passive vibrations control</title>. , 2003, 5052, 392.		5
189	<title>Distributed electric absorbers of beam vibrations</title>. , 2003, 5052, 230.		1
190	Synthesis of electrical networks interconnecting PZT actuators to damp mechanical vibrations. International Journal of Applied Electromagnetics and Mechanics, 2002, 14, 417-424.	0.3	9
191	Optimal piezo-electro-mechanical coupling to control plate vibrations. International Journal of Applied Electromagnetics and Mechanics, 2002, 13, 113-120.	0.3	8
192	A revival of electric analogs for vibrating mechanical systems aimed to their efficient control by PZT actuators. International Journal of Solids and Structures, 2002, 39, 5295-5324.	1.3	85
193	Wave motions in unbounded poroelastic solids infused with compressible fluids. Zeitschrift Fur Angewandte Mathematik Und Physik, 2002, 53, 1110-1138.	0.7	22
194	A solid-fluid mixture model allowing for solid dilatation under external pressure. Continuum Mechanics and Thermodynamics, 2001, 13, 287-306.	1.4	45
195	Vibration control in plates by uniformly distributed PZT actuators interconnected via electric networks. European Journal of Mechanics, A/Solids, 2001, 20, 435-456.	2.1	78
196	Saint-Venant's problem for a second-order piezoelectric prismatic bar. International Journal of Engineering Science, 2000, 38, 21-45.	2.7	9
197	A variational approach for the deformation of a saturated porous solid. A second-gradient theory extending Terzaghi's effective stress principle. Archive of Applied Mechanics, 2000, 70, 323-337.	1.2	89
198	The influence of the curvature dependence of the surface tension on the geometry of electrically charged menisci. Continuum Mechanics and Thermodynamics, 1999, 11, 89-105.	1.4	8

#	Article	IF	Citations
199	Variations of porosity in a sheared pressurized layer of saturated soil induced by vertical drainage of water. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1999, 455, 2841-2860.	1.0	8
200	Generalized Poynting Effects in Predeformed Prismatic Bars. Journal of Elasticity, 1998, 50, 181-196.	0.9	24
201	Title is missing!. Journal of Elasticity, 1998, 52, 75-90.	0.9	15
202	Continuum modelling of piezoelectromechanical truss beams: an application to vibration damping. Archive of Applied Mechanics, 1998, 68, 1-19.	1.2	73
203	Damping of bending waves in truss beams by electrical transmission lines with PZT actuators. Archive of Applied Mechanics, 1998, 68, 626-636.	1.2	57
204	A micro-structured continuum modelling compacting fluid-saturated grounds: the effects of pore-size scale parameter. Acta Mechanica, 1998, 127, 165-182.	1.1	60
205	What are the dominant thermomechanical processes in the basal sediment layer of large ice sheets?. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1998, 454, 1169-1195.	1.0	30
206	Generalizing Jouravski Formulas by Techniques from Differential Geometry. Mathematics and Mechanics of Solids, 1997, 2, 307-319.	1.5	4
207	Distributed control of beams by electric transmission lines with PZT actuators. , 1997, , .		3
208	Continuum mechanical modelling of the dissipative processes in the sediment-water layer below glaciers. Comptes Rendus De L'AcadÃ©mie Des Sciences - Series IIB - Mechanics-Physics-Chemistry-Astronomy, 1997, 325, 449-456.	0.1	2
209	On phase transition layers in certain micro-damaged two-phase solids. International Journal of Fracture, 1997, 83, 175-189.	1.1	24
210	Saint-Venant's Problem for Porous Linear Elastic Materials. Journal of Elasticity, 1997, 47, 73-81.	0.9	44
211	Title is missing!. Journal of Elasticity, 1997, 49, 113-127.	0.9	19
212	Edge Contact Forces and Quasi-Balanced Power. Meccanica, 1997, 32, 33-52.	1.2	156
213	Almansi-type boundary conditions for electric potential inducing flexure in linear piezoelectric beams. Continuum Mechanics and Thermodynamics, 1997, 9, 115-125.	1.4	15
214	On thermokinematic analysis of pipe shaping in cast ingots: A numerical simulation via FDM. International Journal of Engineering Science, 1996, 34, 1349-1367.	2.7	10
215	Perturbation methods in torsion of thin hollow Saint-Venant cylinders. Mechanics Research Communications, 1996, 23, 145-150.	1.0	12
216	Perturbation series for shear stress in flexure of saint-venant cylinders with Bredt-like sections. Mechanics Research Communications, 1996, 23, 557-564.	1.0	7

#	Article	IF	Citations
217	An Extension of Kelvin and Bredt Formulas. Mathematics and Mechanics of Solids, 1996, 1, 243-250.	1.5	8
218	<title>Saint Venant problem in linear piezoelectricity</title>. , 1996, , .		9
219	Validity of Laplace formula and dependence of surface tension on curvature in second gradient fluids. Mechanics Research Communications, 1995, 22, 485-490.	1.0	21
220	Linear growth of a liquid droplet divided from its vapour by a â€œsoap bubbleâ€•like fluid interface. International Journal of Engineering Science, 1989, 27, 1053-1067.	2.7	9
221	On phase transition in classical fluid mixtures with surface adsorption. International Journal of Engineering Science, 1989, 27, 1069-1078.	2.7	10
222	On the derivation of thermomechanical balance equations for continuous systems with a nonmaterial interface. International Journal of Engineering Science, 1987, 25, 1459-1468.	2.7	102
223	A phenomenological approach to phase transition in classical field theory. International Journal of Engineering Science, 1987, 25, 1469-1475.	2.7	47
224	SHEARING TESTS APPLIED TO PANTOGRAPHIC STRUCTURES. Acta Polytechnica CTU Proceedings, 0, 7, 1.	0.3	20
225	Damage Detection with Auxiliary Subsystem. Advances in Science and Technology, 0, , 401-413.	0.2	3