

Angela Madeo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8110303/publications.pdf>

Version: 2024-02-01

82
papers

3,587
citations

109264

35
h-index

138417

58
g-index

83
all docs

83
docs citations

83
times ranked

1046
citing authors

#	ARTICLE	IF	CITATIONS
1	Analytical solution of the uniaxial extension problem for the relaxed micromorphic continuum and other generalized continua (including full derivations). <i>Archive of Applied Mechanics</i> , 2023, 93, 5-21.	1.2	8
2	Analytical solution of the cylindrical torsion problem for the relaxed micromorphic continuum and other generalized continua (including full derivations). <i>Mathematics and Mechanics of Solids</i> , 2022, 27, 507-553.	1.5	9
3	Boundary and interface conditions in the relaxed micromorphic model: Exploring finite-size metastructures for elastic wave control. <i>Mathematics and Mechanics of Solids</i> , 2022, 27, 1053-1068.	1.5	14
4	Existence and uniqueness of Rayleigh waves in isotropic elastic Cosserat materials and algorithmic aspects. <i>Wave Motion</i> , 2022, 110, 102898.	1.0	5
5	Towards the conception of complex engineering meta-structures: Relaxed-micromorphic modelling of low-frequency mechanical diodes/high-frequency screens. <i>Wave Motion</i> , 2022, 113, 102920.	1.0	6
6	Metamaterial shields for inner protection and outer tuning through a relaxed micromorphic approach. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2022, 380, .	1.6	10
7	Unfolding engineering metamaterials design: Relaxed micromorphic modeling of large-scale acoustic meta-structures. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 168, 104995.	2.3	12
8	Model reduction for the forming process of fibrous composites structures via second gradient enriched continuum models. <i>Mechanics of Advanced Materials and Structures</i> , 2021, 28, 1061-1072.	1.5	4
9	Analytical solutions of the simple shear problem for micromorphic models and other generalized continua. <i>Archive of Applied Mechanics</i> , 2021, 91, 2237-2254.	1.2	18
10	Analytical solutions of the cylindrical bending problem for the relaxed micromorphic continuum and other generalized continua. <i>Continuum Mechanics and Thermodynamics</i> , 2021, 33, 1505-1539.	1.4	16
11	Exploring Metamaterials™ Structures Through the Relaxed Micromorphic Model: Switching an Acoustic Screen Into an Acoustic Absorber. <i>Frontiers in Materials</i> , 2021, 7, .	1.2	15
12	Identification of Scale-Independent Material Parameters in the Relaxed Micromorphic Model Through Model-Adapted First Order Homogenization. <i>Journal of Elasticity</i> , 2020, 139, 269-298.	0.9	38
13	Effective Description of Anisotropic Wave Dispersion in Mechanical Band-Gap Metamaterials via the Relaxed Micromorphic Model. <i>Journal of Elasticity</i> , 2020, 139, 299-329.	0.9	39
14	Frequency- and angle-dependent scattering of a finite-sized meta-structure via the relaxed micromorphic model. <i>Archive of Applied Mechanics</i> , 2020, 90, 1073-1096.	1.2	19
15	Microstructure-related Stoneley waves and their effect on the scattering properties of a 2D Cauchy/relaxed-micromorphic interface. <i>Wave Motion</i> , 2019, 90, 99-120.	1.0	15
16	Dispersion of Waves in Micromorphic Media and Metamaterials. , 2019, , 713-739.		2
17	Relaxed micromorphic model of transient wave propagation in anisotropic band-gap metastructures. <i>International Journal of Solids and Structures</i> , 2019, 162, 148-163.	1.3	27
18	The difficulties in modeling the mechanical behavior of textile composite reinforcements with standard continuum mechanics of Cauchy. Some possible remedies. <i>International Journal of Solids and Structures</i> , 2018, 154, 55-65.	1.3	39

#	ARTICLE	IF	CITATIONS
19	Modeling Phononic Crystals via the Weighted Relaxed Micromorphic Model with Free and Gradient Micro-Inertia. <i>Journal of Elasticity</i> , 2018, 130, 59-83.	0.9	26
20	Relaxed micromorphic modeling of the interface between a homogeneous solid and a band-gap metamaterial: New perspectives towards metastructural design. <i>Mathematics and Mechanics of Solids</i> , 2018, 23, 1485-1506.	1.5	14
21	Anisotropic wave dispersion and band-gaps in mechanical metamaterials via the relaxed micromorphic model. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2018, 18, e201800413.	0.2	3
22	Integration of material and process modelling in a business decision support system: Case of COMPOSELECTOR H2020 project. <i>Composite Structures</i> , 2018, 204, 778-790.	3.1	17
23	The Need to Use Generalized Continuum Mechanics to Model 3D Textile Composite Forming. <i>Applied Composite Materials</i> , 2018, 25, 761-771.	1.3	16
24	A variant of the linear isotropic indeterminate couple-stress model with symmetric local force-stress, symmetric nonlocal force-stress, symmetric couple-stresses and orthogonal boundary conditions. <i>Mathematics and Mechanics of Solids</i> , 2017, 22, 1221-1266.	1.5	28
25	Modeling and designing micro- and nano-structured metamaterials: Towards the application of exotic behaviors. <i>Mathematics and Mechanics of Solids</i> , 2017, 22, 873-884.	1.5	5
26	Mechanically-driven bone remodeling simulation: Application to LIPUS treated rat calvarial defects. <i>Mathematics and Mechanics of Solids</i> , 2017, 22, 1976-1988.	1.5	29
27	Bias extension test on an unbalanced woven composite reinforcement: Experiments and modeling via a second-gradient continuum approach. <i>Journal of Composite Materials</i> , 2017, 51, 153-170.	1.2	30
28	The bias-extension test for the analysis of in-plane shear properties of textile composite reinforcements and prepregs: a review. <i>International Journal of Material Forming</i> , 2017, 10, 473-492.	0.9	152
29	Transparent anisotropy for the relaxed micromorphic model: Macroscopic consistency conditions and long wave length asymptotics. <i>International Journal of Solids and Structures</i> , 2017, 120, 7-30.	1.3	54
30	Real wave propagation in the isotropic-relaxed micromorphic model. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2017, 473, 20160790.	1.0	36
31	On the role of micro-inertia in enriched continuum mechanics. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2017, 473, 20160722.	1.0	22
32	A panorama of dispersion curves for the weighted isotropic relaxed micromorphic model. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2017, 97, 1436-1481.	0.9	11
33	The modified indeterminate couple stress model: Why Yang et al.'s arguments motivating a symmetric couple stress tensor contain a gap and why the couple stress tensor may be chosen symmetric nevertheless. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2017, 97, 1524-1554.	0.9	31
34	A Review on Wave Propagation Modeling in Band-Gap Metamaterials via Enriched Continuum Models. <i>Advanced Structured Materials</i> , 2017, , 89-105.	0.3	11
35	Simulations of 3D textile composite reinforcements. Specificities of the mechanical behavior. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	1
36	Modelling the deep drawing of a 3D woven fabric with a second gradient model. <i>Mathematics and Mechanics of Solids</i> , 2017, 22, 2165-2179.	1.5	28

#	ARTICLE	IF	CITATIONS
37	Dispersion of Waves in Micromorphic Media and Metamaterials. , 2017, , 1-27.		1
38	Continuum and discrete models for unbalanced woven fabrics. International Journal of Solids and Structures, 2016, 94-95, 263-284.	1.3	31
39	Complete band gaps including non-local effects occur only in the relaxed micromorphic model. Comptes Rendus - Mecanique, 2016, 344, 784-796.	2.1	25
40	Null Lagrangians and the indeterminate couple stress model. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 379-380.	0.2	4
41	Reflection and transmission of elastic waves in non-local band-gap metamaterials: A comprehensive study via the relaxed micromorphic model. Journal of the Mechanics and Physics of Solids, 2016, 95, 441-479.	2.3	59
42	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
43	Towards the design of an enriched concrete with enhanced dissipation performances. Cement and Concrete Research, 2016, 84, 48-61.	4.6	37
44	A new view on boundary conditions in the Grioli-Koiter-Mindlin-Toupin indeterminate couple stress model. European Journal of Mechanics, A/Solids, 2016, 59, 294-322.	2.1	26
45	Modelling the development of defects during composite reinforcements and prepreg forming. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150269.	1.6	33
46	First evidence of non-locality in real band-gap metamaterials: determining parameters in the relaxed micromorphic model. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20160169.	1.0	39
47	Cauchy Tetrahedron Argument Applied to Higher Contact Interactions. Archive for Rational Mechanics and Analysis, 2016, 219, 1305-1341.	1.1	66
48	On some fundamental misunderstandings in the indeterminate couple stress model. A comment on recent papers of A.R. Hadjesfandiari and G.F. Dargush. International Journal of Solids and Structures, 2016, 81, 233-243.	1.3	48
49	The influence of different loads on the remodeling process of a bone and bioresorbable material mixture with voids. Continuum Mechanics and Thermodynamics, 2016, 28, 21-40.	1.4	37
50	A micro-structural model for dissipation phenomena in the concrete. International Journal for Numerical and Analytical Methods in Geomechanics, 2015, 39, 2037-2052.	1.7	31
51	Wave propagation in pantographic 2D lattices with internal discontinuities. Proceedings of the Estonian Academy of Sciences, 2015, 64, 325.	0.9	24
52	The relaxed linear micromorphic continuum: well-posedness of the static problem and relations to the gauge theory of dislocations. Quarterly Journal of Mechanics and Applied Mathematics, 2015, 68, 53-84.	0.5	56
53	The relaxed linear micromorphic continuum: Existence, uniqueness and continuous dependence in dynamics. Mathematics and Mechanics of Solids, 2015, 20, 1171-1197.	1.5	67
54	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
55	Instability and advanced models for coupled phenomena in geomechanics and applied sciences: a tribute to Félix Darve. <i>Continuum Mechanics and Thermodynamics</i> , 2015, 27, 3-4.	1.4	0
56	Thick fibrous composite reinforcements behave as special second-gradient materials: three-point bending of 3D interlocks. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2015, 66, 2041-2060.	0.7	48
57	Bias Extension Test for In-Plane Shear Properties during Forming - Use at High Temperature and Limits of the Test. <i>Key Engineering Materials</i> , 2015, 651-653, 369-374.	0.4	0
58	Wave propagation in relaxed micromorphic continua: modeling metamaterials with frequency band-gaps. <i>Continuum Mechanics and Thermodynamics</i> , 2015, 27, 551-570.	1.4	106
59	Modeling of the interaction between bone tissue and resorbable biomaterial as linear elastic materials with voids. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2015, 66, 209-237.	0.7	67
60	Band gaps in the relaxed linear micromorphic continuum. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2015, 95, 880-887.	0.9	61
61	Analytical continuum mechanics $\langle i \rangle \langle /i \rangle$ Hamiltonâ€Piola least action principle for second gradient continua and capillary fluids. <i>Mathematics and Mechanics of Solids</i> , 2015, 20, 375-417.	1.5	212
62	On Grioliâ€™s minimum property and its relation to Cauchyâ€™s polar decomposition. <i>International Journal of Engineering Science</i> , 2014, 80, 209-217.	2.7	34
63	Modeling the onset of shear boundary layers in fibrous composite reinforcements by second-gradient theory. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2014, 65, 587-612.	0.7	117
64	A unifying perspective: the relaxed linear micromorphic continuum. <i>Continuum Mechanics and Thermodynamics</i> , 2014, 26, 639-681.	1.4	202
65	A simple non-linear model for internal friction in modified concrete. <i>International Journal of Engineering Science</i> , 2014, 80, 136-152.	2.7	61
66	Towards the Design of Metamaterials with Enhanced Damage Sensitivity: Second Gradient Porous Materials. <i>Research in Nondestructive Evaluation</i> , 2014, 25, 99-124.	0.5	46
67	Reflection and transmission of plane waves at surfaces carrying material properties and embedded in second-gradient materials. <i>Mathematics and Mechanics of Solids</i> , 2014, 19, 555-578.	1.5	124
68	The relaxed micromorphic continuum model. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014, 14, 733-734.	0.2	4
69	Least Action Principle for Second Gradient Continua and Capillary Fluids: A Lagrangian Approach Following Piolaâ€™s Point of View. <i>Advanced Structured Materials</i> , 2014, , 606-694.	0.3	9
70	A continuum model for deformable, second gradient porous media partially saturated with compressible fluids. <i>Journal of the Mechanics and Physics of Solids</i> , 2013, 61, 2196-2211.	2.3	96
71	Switch between fast and slow Biot compression waves induced by â€second gradient microstructureâ€ at material discontinuity surfaces in porous media. <i>International Journal of Solids and Structures</i> , 2013, 50, 1721-1746.	1.3	37
72	The effect of fluid streams in porous media on acoustic compression wave propagation, transmission, and reflection. <i>Continuum Mechanics and Thermodynamics</i> , 2013, 25, 173-196.	1.4	23

#	ARTICLE	IF	CITATIONS
73	Second-gradient models accounting for some effects of microstructure on remodelling of bones reconstructed with bioresorbable materials. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 260-261.	0.9	13
74	How contact interactions may depend on the shape of Cauchy cuts in Nth gradient continua: approach à la D'Alembert. Zeitschrift Fur Angewandte Mathematik Und Physik, 2012, 63, 1119-1141.	0.7	228
75	A second gradient continuum model accounting for some effects of micro-structure on reconstructed bone remodelling. Comptes Rendus - Mecanique, 2012, 340, 575-589.	2.1	94
76	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
77	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
78	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
79	Propagation of acoustic waves in porous media and their reflection and transmission at a pure-fluid/porous-medium permeable interface. European Journal of Mechanics, A/Solids, 2010, 29, 897-910.	2.1	40
80	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
81	A variational deduction of second gradient poroelasticity I: general theory. Journal of Mechanics of Materials and Structures, 2008, 3, 507-526.	0.4	78
82	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