Giuseppe Rosi

List of Publications by Year
in descending order

52 papers	1,867 citations	304602 22 h-index	265120 42 g-index
54 all docs	54 docs citations	54 times ranked	708 citing authors

#	Article	IF	Citations
1	Analytical continuum mechanics <i>Ã la</i> Hamiltonâ€“Piola least action principle for second gradient continua and capillary fluids. Mathematics and Mechanics of Solids, 2015, 20, 375-417.	1.5	212
2	A unifying perspective: the relaxed linear micromorphic continuum. Continuum Mechanics and Thermodynamics, 2014, 26, 639-681.	1.4	202
3	Reflection and transmission of plane waves at surfaces carrying material properties and embedded in second-gradient materials. Mathematics and Mechanics of Solids, 2014, 19, 555-578.	1.5	124
4	Wave propagation in relaxed micromorphic continua: modeling metamaterials with frequency band-gaps. Continuum Mechanics and Thermodynamics, 2015, 27, 551-570.	1.4	106
5	A complete description of bi-dimensional anisotropic strain-gradient elasticity. International Journal of Solids and Structures, 2015, 69-70, 195-206.	1.3	93
6	Anisotropic and dispersive wave propagation within strain-gradient framework. Wave Motion, 2016, 63, 120-134.	1.0	89
7	On the validity range of strain-gradient elasticity: A mixed static-dynamic identification procedure. European Journal of Mechanics, A/Solids, 2018, 69, 179-191.	2.1	79
8	Propagation of linear compression waves through plane interfacial layers and mass adsorption in second gradient fluids. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2013, 93, 914-927.	0.9	68
9	The relaxed linear micromorphic continuum: Existence, uniqueness and continuous dependence in dynamics. Mathematics and Mechanics of Solids, 2015, 20, 1171-1197.	1.5	67
10	Band gaps in the relaxed linear micromorphic continuum. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2015, 95, 880-887.	0.9	61
11	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
12	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
13	Surface/interfacial anti-plane waves in solids with surface energy. Mechanics Research Communications, 2016, 74, 8-13.	1.0	53
14	Comparison of anti-plane surface waves in strain-gradient materials and materials with surface stresses. Mathematics and Mechanics of Solids, 2019, 24, 2526-2535.	1.5	52
15	Towards the Design of Metamaterials with Enhanced Damage Sensitivity: Second Gradient Porous Materials. Research in Nondestructive Evaluation, 2014, 25, 99-124.	0.5	46
16	Linear stability of piezoelectric-controlled discrete mechanical systems under nonconservative positional forces. Meccanica, 2015, 50, 825-839.	1.2	44
17	Transverse surface waves on a cylindrical surface with coating. International Journal of Engineering Science, 2020, 147, 103188.	2.7	40
18	Switch between fast and slow Biot compression waves induced by â€œsecond gradient microstructureâ€• at material discontinuity surfaces in porous media. International Journal of Solids and Structures, 2013, 50, 1721-1746.	1.3	37

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19	Optimization of piezoelectric patch positioning for passive sound radiation control of plates. JVC/Journal of Vibration and Control, 2013, 19, 658-673.	1.5	23
20	The effect of fluid streams in porous media on acoustic compression wave propagation, transmission, and reflection. Continuum Mechanics and Thermodynamics, 2013, 25, 173-196.	1.4	23
21	Wave propagation across a finite heterogeneous interphase modeled as an interface with material properties. Mechanics Research Communications, 2017, 84, 43-48.	1.0	23
22	Multi-scale design of an architected composite structure with optimized graded properties. Composite Structures, 2020, 252, 112608.	3.1	23
23	Monitoring cementless femoral stem insertion by impact analyses: An in vitro study. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 88, 102-108.	1.5	22
24	On the failure of the â€˜Similar Piezoelectric Controlâ€™ in preventing loss of stability by nonconservative positional forces. Zeitschrift Fur Angewandte Mathematik Und Physik, 2015, 66, 1949-1968.	0.7	20
25	Continuum modelling of frequency dependent acoustic beam focussing and steering in hexagonal lattices. European Journal of Mechanics, A/Solids, 2019, 77, 103803.	2.1	19
26	Numerical investigations of ultrasound wave propagating in long bones using a poroelastic model. Mathematics and Mechanics of Solids, 2016, 21, 119-133.	1.5	16
27	Influence of anisotropic bone properties on the biomechanical behavior of the acetabular cup implant: a multiscale finite element study. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 1312-1325.	0.9	16
28	Ex vivo estimation of cementless femoral stem stability using an instrumented hammer. Clinical Biomechanics, 2020, 76, 105006.	0.5	16
29	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
30	A cadaveric validation of a method based on impact analysis to monitor the femoral stem insertion. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 103, 103535.	1.5	14
31	Analytical Solutions of 2-dimensional Second Gradient Linear Elasticity for Continua with Cubic-D4 Microstructure. Advanced Structured Materials, 2019, , 383-401.	0.3	12
32	Wave propagation across a functionally graded interphase between soft and hard solids: Insight from a dynamic surface elasticity model. Journal of the Mechanics and Physics of Solids, 2021, 151, 104380.	2.3	12
33	Piezoelectric control of Hopf bifurcations: A non-linear discrete case study. International Journal of Non-Linear Mechanics, 2016, 80, 160-169.	1.4	11
34	Influence of soft tissue in the assessment of the primary fixation of acetabular cup implants using impact analyses. Clinical Biomechanics, 2018, 55, 7-13.	0.5	11
35	Ultrasound characterization of bioinspired functionally graded soft-to-hard composites: Experiment and modeling. Journal of the Acoustical Society of America, 2022, 151, 1490-1501.	0.5	11
36	Reflection of acoustic wave at the interface of a fluid-loaded dipolargradient elastic half-space. Mechanics Research Communications, 2014, 56, 98-103.	1.0	10

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37	Surface waves at the interface between an inviscid fluid and a dipolar gradient solid. Wave Motion, 2015, 53, 51-65.	1.0	10
38	Effects of the microstructure and density profiles on wave propagation across an interface with material properties. Continuum Mechanics and Thermodynamics, 2019, 31, 1165-1180.	1.4	9
39	On the Failure of Classic Elasticity in Predicting Elastic Wave Propagation in Gyroid Lattices for Very Long Wavelengths. Symmetry, 2020, 12, 1243.	1.1	9
40	Controlling the Limit-Cycle of the Ziegler Column via a Tuned Piezoelectric Damper. Mathematical Problems in Engineering, 2015, 2015, 1-9.	0.6	8
41	Ex Vivo Evaluation of Cementless Acetabular Cup Stability Using Impact Analyses with a Hammer Instrumented with Strain Sensors. Sensors, 2018, 18, 62.	2.1	8
42	Ultrasonic characterization and multiscale analysis for the evaluation of dental implant stability: A sensitivity study. Biomedical Signal Processing and Control, 2018, 42, 37-44.	3.5	7
43	Anatomical subject validation of an instrumented hammer using machine learning for the classification of osteotomy fracture in rhinoplasty. Medical Engineering and Physics, 2021, 95, 111-116.	0.8	7
44	Using an Impact Hammer to Estimate Elastic Modulus and Thickness of a Sample During an Osteotomy. Journal of Biomechanical Engineering, 2020, 142, .	0.6	6
45	Assessing the effective elastic properties of the tendon-to-bone insertion: a multiscale modeling approach. Biomechanics and Modeling in Mechanobiology, 2021, 20, 433-448.	1.4	5
46	Using an impact hammer to perform biomechanical measurements during osteotomies: Study of an animal model. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2021, 235, 838-845.	1.0	4
47	Modal Analysis of the Ancillary During Femoral Stem Insertion: A Study on Bone Mimicking Phantoms. Annals of Biomedical Engineering, 2022, 50, 16-28.	1.3	4
48	Wave propagation in strain gradient poroelastic medium with microinertia: closed-form and finite element solutions. Zeitschrift Fur Angewandte Mathematik Und Physik, 2017, 68, 1.	0.7	2
49	Validation of an Instrumented Hammer for Rhinoplasty Osteotomies: A Cadaveric Study. Facial Plastic Surgery and Aesthetic Medicine, 2021, , .	0.5	1
50	Closed-Form and Finite Element Solutions of Wave Propagation in Strain Gradient Poroelastic Medium with Micro Inertia. , 2017, , .		0
51	Waves and Generalized Continua. , 2018, , 1-9.		0
52	Waves and Generalized Continua. , 2020, , 2756-2765.		0