# Raimondo Luciano

## List of Publications by Year
in descending order

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|---|---|---|---|
| 121<br>papers | 5,440<br>citations | 46918<br>47<br>h-index | 102304<br>66<br>g-index |
| 121<br>all docs | 121<br>docs citations | 121<br>times ranked | 1912<br>citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 1 | 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 |
| 2 | Functionally graded Timoshenko nanobeams: A novel nonlocal gradient formulation. Composites Part B: Engineering, 2016, 100, 208-219. | 5.9 | 192 |
| 3 | Homogenization technique and damage model for old masonry material. International Journal of Solids and Structures, 1997, 34, 3191-3208. | 1.3 | 185 |
| 4 | Free vibrations of elastic beams by modified nonlocal strain gradient theory. International Journal of Engineering Science, 2018, 133, 99-108. | 2.7 | 122 |
| 5 | Stress-driven modeling of nonlocal thermoelastic behavior of nanobeams. International Journal of Engineering Science, 2018, 126, 53-67. | 2.7 | 121 |
| 6 | Longitudinal vibrations of nano-rods by stress-driven integral elasticity. Mechanics of Advanced Materials and Structures, 2019, 26, 1307-1315. | 1.5 | 103 |
| 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 | Torsion of functionally graded nonlocal viscoelastic circular nanobeams. Composites Part B: Engineering, 2015, 72, 217-222. | 5.9 | 86 |
| 12 | 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 |
| 13 | Experimental investigation on masonry arches strengthened with PBO-FRCM composite. Composites Part B: Engineering, 2016, 100, 228-239. | 5.9 | 83 |
| 14 | A closed-form model for torsion of nanobeams with an enhanced nonlocal formulation. Composites Part B: Engineering, 2017, 108, 315-324. | 5.9 | 83 |
| 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 | Stress-driven integral elastic theory for torsion of nano-beams. Mechanics Research Communications, 2018, 87, 35-41. | 1.0 | 82 |
| 17 | Variational formulations for functionally graded nonlocal Bernoulliâ€"Euler nanobeams. Composite Structures, 2015, 129, 80-89. | 3.1 | 79 |
| 18 | Micromechanical analysis of interfacial debonding in unidirectional fiber-reinforced composites. Computers and Structures, 2006, 84, 2200-2211. | 2.4 | 77 |

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|---|---------|-----|-----------|
| 19 | Nonlocal integral elasticity in nanostructures, mixtures, boundary effects and limit behaviours. Continuum Mechanics and Thermodynamics, 2018, 30, 641-655. | 1.4 | 75 |
| 20 | A stress-driven local-nonlocal mixture model for Timoshenko nano-beams. Composites Part B: Engineering, 2019, 164, 590-598. | 5.9 | 75 |
| 21 | A multiscale damage analysis of periodic composites using a couple-stress/Cauchy multidomain model: Application to masonry structures. Composites Part B: Engineering, 2018, 141, 50-59. | 5.9 | 73 |
| 22 | Nonlocal inflected nano-beams: A stress-driven approach of bi-Helmholtz type. Composite Structures, 2018, 200, 239-245. | 3.1 | 71 |
| 23 | Carbon-FRCM materials for structural upgrade of masonry arch road bridges. Composites Part B: Engineering, 2015, 75, 355-366. | 5.9 | 70 |
| 24 | Experimental evaluations and modeling of the tensile behavior of polypropylene/single-walled carbon nanotubes fibers. Composite Structures, 2017, 174, 12-18. | 3.1 | 70 |
| 25 | 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 |
| 26 | Nonlocal strain gradient exact solutions for functionally graded inflected nano-beams. Composites Part B: Engineering, 2019, 164, 667-674. | 5.9 | 68 |
| 27 | A gradient Eringen model for functionally graded nanorods. Composite Structures, 2015, 131, 1124-1131. | 3.1 | 67 |
| 28 | A theoretical and numerical stability analysis for composite micro-structures by using homogenization theory. Composites Part B: Engineering, 2011, 42, 382-401. | 5.9 | 66 |
| 29 | Stress-driven two-phase integral elasticity for torsion of nano-beams. Composites Part B: Engineering, 2018, 145, 62-69. | 5.9 | 65 |
| 30 | Some analytical solutions of functionally graded Kirchhoff plates. Composites Part B: Engineering, 2015, 68, 266-269. | 5.9 | 63 |
| 31 | Non-local constitutive response of a random laminate subjected to configuration-dependent body force. Journal of the Mechanics and Physics of Solids, 2001, 49, 431-444. | 2.3 | 62 |
| 32 | Analogies between Kirchhoff plates and functionally graded Saint-Venant beams under torsion. Continuum Mechanics and Thermodynamics, 2015, 27, 499-505. | 1.4 | 62 |
| 33 | An Eringen-like model for Timoshenko nanobeams. Composite Structures, 2016, 139, 104-110. | 3.1 | 62 |
| 34 | Exact solutions of isotropic viscoelastic functionally graded Kirchhoff plates. Composite Structures, 2014, 118, 448-454. | 3.1 | 61 |
| 35 | On torsion of random composite beams. Composite Structures, 2015, 132, 915-922. | 3.1 | 58 |
| 36 | Numerical collapse load of multi-span masonry arch structures with FRP reinforcement. Composites Part B: Engineering, 2013, 54, 71-84. | 5.9 | 57 |

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| 37 | Limit analysis of masonry arches with externally bonded FRP reinforcements. Computer Methods in Applied Mechanics and Engineering, 2006, 196, 247-260. | 3.4 | 55 |
| 38 | Some closed-form solutions of functionally graded beams undergoing nonuniform torsion. Composite Structures, 2015, 123, 132-136. | 3.1 | 54 |
| 39 | Experimental Investigation on Bond Behavior of Cement-Matrix–Based Composites for Strengthening of Masonry Structures. Journal of Composites for Construction, 2016, 20, . | 1.7 | 54 |
| 40 | Limit analysis of FRP strengthened masonry arches via nonlinear and linear programming. Composites Part B: Engineering, 2012, 43, 439-446. | 5.9 | 53 |
| 41 | Debonding of FRP in multi-span masonry arch structures via limit analysis. Composite Structures, 2014, 108, 856-865. | 3.1 | 53 |
| 42 | Limit analysis of masonry arches with finite compressive strength and externally bonded reinforcement. Composites Part B: Engineering, 2012, 43, 3131-3145. | 5.9 | 52 |
| 43 | A Fully Gradient Model for Euler-Bernoulli Nanobeams. Mathematical Problems in Engineering, 2015, 2015, 1-8. | 0.6 | 51 |
| 44 | Size-dependent buckling analysis of nanobeams resting on two-parameter elastic foundation through stress-driven nonlocal elasticity model. Mechanics of Advanced Materials and Structures, 2021, 28, 2408-2416. | 1.5 | 51 |
| 45 | Analytical Expressions for the Relaxation Moduli of Linear Viscoelastic Composites With Periodic Microstructure. Journal of Applied Mechanics, Transactions ASME, 1995, 62, 786-793. | 1.1 | 50 |
| 46 | Boundary-layer corrections for stress and strain fields in randomly heterogeneous materials. Journal of the Mechanics and Physics of Solids, 2003, 51, 1075-1088. | 2.3 | 50 |
| 47 | FE analysis of stress and strain fields in finite random composite bodies. Journal of the Mechanics and Physics of Solids, 2005, 53, 1505-1522. | 2.3 | 50 |
| 48 | Higher modes of buckling in shear deformable nanobeams. International Journal of Engineering Science, 2020, 154, 103338. | 2.7 | 50 |
| 49 | Bounds on non-local effective relations for random composites loaded by configuration-dependent body force. Journal of the Mechanics and Physics of Solids, 2000, 48, 1827-1849. | 2.3 | 48 |
| 50 | On methods for bounding the overall properties of periodic piezoelectric fibrous composites. Journal of the Mechanics and Physics of Solids, 1997, 45, 1329-1356. | 2.3 | 43 |
| 51 | An adaptive multiscale strategy for the damage analysis of masonry modeled as a composite material. Composite Structures, 2016, 153, 972-988. | 3.1 | 43 |
| 52 | A refined diffuse cohesive approach for the failure analysis in quasibrittle materials—part II: Application to plain and reinforced concrete structures. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 2764-2781. | 1.7 | 42 |
| 53 | A refined diffuse cohesive approach for the failure analysis in quasibrittle materials—part I: Theoretical formulation and numerical calibration. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 221-241. | 1.7 | 42 |
| 54 | Multiscale failure analysis of periodic masonry structures with traditional and fiber-reinforced mortar joints. Composites Part B: Engineering, 2017, 118, 75-95. | 5.9 | 41 |

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| 55 | Mixed-mode fracture in lightweight aggregate concrete by using a moving mesh approach within a multiscale framework. Composite Structures, 2015, 123, 88-97. | 3.1 | 40 |
| 56 | Hygro-thermal vibrations and buckling of laminated nanoplates via nonlocal strain gradient theory. Composite Structures, 2021, 262, 113337. | 3.1 | 40 |
| 57 | A multiscale analysis of instability-induced failure mechanisms in fiber-reinforced composite structures via alternative modeling approaches. Composite Structures, 2020, 251, 112529. | 3.1 | 39 |
| 58 | Bounds on the overall properties of composites with debonded frictionless interfaces. Mechanics of Materials, 1998, 28, 23-32. | 1.7 | 38 |
| 59 | Hashin–Shtrikman Based FE Analysis of the Elastic Behaviour of Finite Random Composite Bodies. International Journal of Fracture, 2006, 137, 261-273. | 1.1 | 38 |
| 60 | A multiscale model for the numerical simulation of the anchor bolt pull-out test in lightweight aggregate concrete. Construction and Building Materials, 2015, 95, 860-874. | 3.2 | 38 |
| 61 | Comparative micromechanical assessment of adobe and clay brick masonry assemblages based on experimental data sets. Composite Structures, 2015, 120, 208-220. | 3.1 | 38 |
| 62 | Strengthening Masonry Arches with Lime-Based Mortar Composite. Buildings, 2017, 7, 49. | 1.4 | 38 |
| 63 | Critical Temperatures for Vibrations and Buckling of Magneto-Electro-Elastic Nonlocal Strain Gradient Plates. Nanomaterials, 2021, 11, 87. | 1.9 | 38 |
| 64 | Nonlinear free vibrations analysis of geometrically imperfect FG nano-beams based on stress-driven nonlocal elasticity with initial pretension force. Composite Structures, 2021, 255, 112856. | 3.1 | 37 |
| 65 | Nonlinear homogenized properties of defected composite materials. Computers and Structures, 2014, 134, 102-111. | 2.4 | 36 |
| 66 | Solution for cross- and angle-ply laminated Kirchhoff nano plates in bending using strain gradient theory. Composites Part B: Engineering, 2019, 173, 107006. | 5.9 | 36 |
| 67 | Analytical solution of cross- and angle-ply nano plates with strain gradient theory for linear vibrations and buckling. Mechanics of Advanced Materials and Structures, 2021, 28, 1201-1215. | 1.5 | 36 |
| 68 | Irregular stone masonries: Analysis and strengthening with glass fibre reinforced composites. Composites Part B: Engineering, 2016, 92, 84-93. | 5.9 | 35 |
| 69 | Trigonometric Solution for the Bending Analysis of Magneto-Electro-Elastic Strain Gradient Nonlocal Nanoplates in Hygro-Thermal Environment. Mathematics, 2021, 9, 567. | 1.1 | 35 |
| 70 | Nonlinear effects in fracture induced failure of compressively loaded fiber reinforced composites. Composite Structures, 2018, 189, 688-699. | 3.1 | 34 |
| 71 | An interface approach based on moving mesh and cohesive modeling in Z-pinned composite laminates. Composites Part B: Engineering, 2018, 135, 207-217. | 5.9 | 34 |
| 72 | Damage mechanics of cement concrete modeled as a four-phase composite. Composites Part B: Engineering, 2014, 65, 124-130. | 5.9 | 33 |

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| 73 | A mixed explicitâ€"implicit time integration approach for nonlinear analysis of base-isolated structures. Annals of Solid and Structural Mechanics, 2018, 10, 17-29. | 0.5 | 33 |
| 74 | Exact closed-form solutions for nonlocal beams with loading discontinuities. Mechanics of Advanced Materials and Structures, 2022, 29, 694-704. | 1.5 | 32 |
| 75 | Critical surfaces for adobe masonry: Micromechanical approach. Composites Part B: Engineering, 2014, 56, 790-796. | 5.9 | 29 |
| 76 | Free transverse vibrations of nanobeams with multiple cracks. International Journal of Engineering Science, 2022, 177, 103703. | 2.7 | 29 |
| 77 | Size-dependent linear elastic fracture of nanobeams. International Journal of Engineering Science, 2020, 157, 103381. | 2.7 | 28 |
| 78 | Free flexural vibrations of nanobeams with non-classical boundary conditions using stress-driven nonlocal model. Mechanics Research Communications, 2020, 107, 103536. | 1.0 | 27 |
| 79 | Nonlocal strain and stress gradient elasticity of Timoshenko nano-beams with loading discontinuities. International Journal of Engineering Science, 2022, 173, 103620. | 2.7 | 27 |
| 80 | Novel local/nonlocal formulation of the stress-driven model through closed form solution for higher vibrations modes. Composite Structures, 2020, 252, 112688. | 3.1 | 25 |
| 81 | Non-local constitutive equations for functionally graded materials. Mechanics of Materials, 2004, 36, 1195-1206. | 1.7 | 24 |
| 82 | Variational approaches for bending and buckling of non-local stress-driven Timoshenko nano-beams for smart materials. Mechanics Research Communications, 2020, 103, 103470. | 1.0 | 24 |
| 83 | Material Symmetries in Homogenized Hexagonal-Shaped Composites as Cosserat Continua. Symmetry, 2020, 12, 441. | 1.1 | 24 |
| 84 | Band gap tuning through microscopic instabilities of compressively loaded lightened nacre-like composite metamaterials. Composite Structures, 2022, 282, 115032. | 3.1 | 24 |
| 85 | Micromechanical analysis of adobe masonry as two-component composite: Influence of bond and loading schemes. Composite Structures, 2014, 112, 254-263. | 3.1 | 23 |
| 86 | Eigenstrain and Fourier series for evaluation of elastic local fields and effective properties of periodic composites. Composites Part B: Engineering, 2015, 81, 251-258. | 5.9 | 22 |
| 87 | An improved fracture approach to investigate the degradation of vibration characteristics for reinforced concrete beams under progressive damage. International Journal of Fatigue, 2022, 163, 107032. | 2.8 | 22 |
| 88 | Fourier series expansion in non-orthogonal coordinate system for the homogenization of linear viscoelastic periodic composites. Composites Part B: Engineering, 2013, 54, 241-245. | 5.9 | 21 |
| 89 | Fracture behaviour of nanobeams through Two-Phase Local/Nonlocal Stress-Driven model. Composite Structures, 2022, 280, 114957. | 3.1 | 21 |
| 90 | Effects of microfracture and contact induced instabilities on the macroscopic response of finitely deformed elastic composites. Composites Part B: Engineering, 2016, 107, 233-253. | 5.9 | 20 |

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| 91 | Free Vibrations of Sandwich Plates with Damaged Soft-Core and Non-Uniform Mechanical Properties: Modeling and Finite Element Analysis. Materials, 2019, 12, 2444. | 1.3 | 20 |
| 92 | A detailed micro-model for brick masonry structures based on a diffuse cohesive-frictional interface fracture approach. Procedia Structural Integrity, 2020, 25, 334-347. | 0.3 | 19 |
| 93 | Linear eigenvalue analysis of laminated thin plates including the strain gradient effect by means of conforming and nonconforming rectangular finite elements. Computers and Structures, 2021, 257, 106676. | 2.4 | 18 |
| 94 | Homogenised properties of composite materials in large deformations. Composite Structures, 2013, 103, 9-17. | 3.1 | 17 |
| 95 | Fracture analysis of nanobeams based on the stress-driven non-local theory of elasticity. Mechanics of Advanced Materials and Structures, 2022, 29, 1967-1976. | 1.5 | 17 |
| 96 | Tensile stiffness and strength of fiber-reinforced concrete. Journal of the Mechanics and Physics of Solids, 2000, 48, 1987-2008. | 2.3 | 15 |
| 97 | Nonlocal layerwise formulation for bending of multilayered/functionally graded nanobeams featuring weak bonding. European Journal of Mechanics, A/Solids, 2021, 86, 104193. | 2.1 | 15 |
| 98 | Non-local effective relations for fibre-reinforced composites loaded by configuration-dependent body forces. Journal of the Mechanics and Physics of Solids, 2001, 49, 2705-2717. | 2.3 | 14 |
| 99 | Analysis of the Influence of Incremental Material Response on the Structural Stability. Mechanics of Advanced Materials and Structures, 2005, 12, 363-377. | 1.5 | 14 |
| 100 | Micromechanical analysis of periodic composites by prescribing the average stress. Annals of Solid and Structural Mechanics, 2010, 1, 117-137. | 0.5 | 14 |
| 101 | Analysis of bond behavior of injected anchors in masonry elements by means of Finite Element Modeling. Composite Structures, 2020, 241, 112099. | 3.1 | 14 |
| 102 | Semi-analytical static analysis of nonlocal strain gradient laminated composite nanoplates in hygrothermal environment. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2021, 43, 1. | 0.8 | 12 |
| 103 | Calibration of the length scale parameter for the stress-driven nonlocal elasticity model from quasi-static and dynamic experiments. Mechanics of Advanced Materials and Structures, 2023, 30, 3518-3524. | 1.5 | 12 |
| 104 | Nano-beams under torsion: a stress-driven nonlocal approach. PSU Research Review, 2017, 1, 164-169. | 1.3 | 10 |
| 105 | Optimization of a Radial Point Interpolation Meshless strategy for strain gradient nanoplates. Engineering Analysis With Boundary Elements, 2022, 140, 70-78. | 2.0 | 10 |
| 106 | Structural integrity of shot peened Ti6Al4V specimens under fretting fatigue. International Journal of Fracture, 2022, 234, 45-55. | 1.1 | 9 |
| 107 | Numerical Investigation on the Use of Flat-Jack Test for Detecting Masonry Deformability. Journal of Testing and Evaluation, 2021, 49, 537-549. | 0.4 | 9 |
| 108 | Micro- and macro-failure models of heterogeneous media with micro-structure. Simulation Modelling Practice and Theory, 2003, 11, 433-448. | 2.2 | 8 |

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| 109 | Nonlocal layerwise formulation for interfacial tractions in layered nanobeams. Mechanics Research Communications, 2020, 109, 103595. | 1.0 | 7 |
| 110 | Modeling of buckling of nanobeams embedded in elastic medium by local-nonlocal stress-driven gradient elasticity theory. Composite Structures, 2022, 297, 115907. | 3.1 | 7 |
| 111 | An Inter-element Fracture Approach for the Analysis of Concrete Cover Separation Failure in FRP-Reinforced RC Beams. Lecture Notes in Mechanical Engineering, 2020, , 537-549. | 0.3 | 6 |
| 112 | Nanobeams with Internal Discontinuities: A Local/Nonlocal Approach. Nanomaterials, 2021, 11, 2651. | 1.9 | 5 |
| 113 | A micromechanical four-phase model to predict the compressive failure surface of cement concrete. Frattura Ed Integrita Strutturale, 2014, 8, 19-27. | 0.5 | 2 |
| 114 | Modulated Linear Dynamics of Functionally Graded Nanobeams With Nonlocal and Gradient Elasticity. , 2018, , 293-323. | | 2 |
| 115 | A numerical model based on ALE formulation to predict fast crack growth in composite structures. Procedia Structural Integrity, 2019, 18, 422-431. | 0.3 | 2 |
| 116 | Meshless Computational Strategy for Higher Order Strain Gradient Plate Models. Mathematical and Computational Applications, 2022, 27, 19. | 0.7 | 2 |
| 117 | Local stress in periodic composites via the Riesz summability method. Composites Part B: Engineering, 2018, 150, 27-35. | 5.9 | 1 |
| 118 | Predictive model for the collapse load of masonry assemblage with two piers joined by a spandrel. Meccanica, 2018, 53, 1803-1817. | 1.2 | 1 |
| 119 | Design Optimization of Road Continuous Girder Bridges. , 2010, , . | | 0 |
| 120 | Bending and Buckling of Timoshenko Nano-Beams in Stress-Driven Approach. Lecture Notes in Mechanical Engineering, 2020, , 832-841. | 0.3 | 0 |
| 121 | Stability analysis at the micro- and macro-scales in periodic bioinspired composites. Procedia Structural Integrity, 2021, 33, 1103-1114. | 0.3 | 0 |