Lorenzo Leonetti

List of Publications by Year
in descending order

45 papers	1,181 citations	236925 25 h-index	377865 34 g-index
45 all docs	45 docs citations	45 times ranked	519 citing authors

#	Article	IF	Citations
1	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.	12.0	73
2	Mechanical behavior of bio-inspired nacre-like composites: A hybrid multiscale modeling approach. Composite Structures, 2020, 233, 111625.	5.8	65
3	A study of concrete cover separation failure in FRP-plated RC beams via an inter-element fracture approach. Composite Structures, 2019, 212, 625-636.	5.8	57
4	Failure Analysis of Ultra High-Performance Fiber-Reinforced Concrete Structures Enhanced with Nanomaterials by Using a Diffuse Cohesive Interface Approach. Nanomaterials, 2020, 10, 1792.	4.1	51
5	A two-scale failure analysis of composite materials in presence of fiber/matrix crack initiation and propagation. Composite Structures, 2013, 95, 582-597.	5.8	50
6	A MULTISCALE/MULTIDOMAIN MODEL FOR THE FAILURE ANALYSIS OF MASONRY WALLS: A VALIDATION WITH A COMBINED FEM/DEM APPROACH. International Journal for Multiscale Computational Engineering, 2018, 16, 325-343.	1.2	49
7	Crack propagation analysis in composite materials by using moving mesh and multiscale techniques. Computers and Structures, 2015, 153, 201-216.	4.4	48
8	An adaptive multiscale strategy for the damage analysis of masonry modeled as a composite material. Composite Structures, 2016, 153, 972-988.	5.8	43
9	A refined diffuse cohesive approach for the failure analysis in quasibrittle materialsâ€”part II: Application to plain and reinforced concrete structures. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 2764-2781.	3.4	42
10	A refined diffuse cohesive approach for the failure analysis in quasibrittle materialsâ€”part I: Theoretical formulation and numerical calibration. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 221-241.	3.4	42
11	Adaptive multiscale modeling of fiber-reinforced composite materials subjected to transverse microcracking. Composite Structures, 2014, 113, 249-263.	5.8	41
12	Multiscale failure analysis of periodic masonry structures with traditional and fiber-reinforced mortar joints. Composites Part B: Engineering, 2017, 118, 75-95.	12.0	41
13	Mixed-mode fracture in lightweight aggregate concrete by using a moving mesh approach within a multiscale framework. Composite Structures, 2015, 123, 88-97.	5.8	40
14	A multiscale analysis of instability-induced failure mechanisms in fiber-reinforced composite structures via alternative modeling approaches. Composite Structures, 2020, 251, 112529.	5.8	39
15	Non-linear macroscopic response of fiber-reinforced composite materials due to initiation and propagation of interface cracks. Engineering Fracture Mechanics, 2012, 80, 92-113.	4.3	38
16	A novel approach based on ALE and delamination fracture mechanics for multilayered composite beams. Composites Part B: Engineering, 2015, 78, 447-458.	12.0	38
17	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.	7.2	38
18	An investigation about debonding mechanisms in FRP-strengthened RC structural elements by using a cohesive/volumetric modeling technique. Theoretical and Applied Fracture Mechanics, 2022, 117, 103199.	4.7	37

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19	Some Novel Numerical Applications of Cosserat Continua. International Journal of Computational Methods, 2018, 15, 1850054.	1.3	33
20	â€˜Explicitâ€™ and â€˜implicitâ€™ non-local continuous descriptions for a plate with circular inclusion in tension. Meccanica, 2020, 55, 927-944.	2.0	32
21	Nonlinear compressive failure analysis of biaxially loaded fiber reinforced materials. Composites Part B: Engineering, 2018, 147, 240-251.	12.0	31
22	Scale Effects in Orthotropic Composite Assemblies as Micropolar Continua: A Comparison between Weak- and Strong-Form Finite Element Solutions. Materials, 2019, 12, 758.	2.9	28
23	Macro- and micro-instabilities in incompressible bioinspired composite materials with nacre-like microstructure. Composite Structures, 2021, 269, 114004.	5.8	27
24	A cohesive fracture model for predicting crack spacing and crack width in reinforced concrete structures. Engineering Failure Analysis, 2022, 139, 106452.	4.0	27
25	Investigation of concrete cracking phenomena by using cohesive fracture-based techniques: A comparison between an embedded crack model and a refined diffuse interface model. Theoretical and Applied Fracture Mechanics, 2021, 115, 103062.	4.7	25
26	Band gap tuning through microscopic instabilities of compressively loaded lightened nacre-like composite metamaterials. Composite Structures, 2022, 282, 115032.	5.8	24
27	Micromodels for the in-plane failure analysis of masonry walls: Limit Analysis, FEM and FEM/DEM approaches. Frattura Ed Integrita Strutturale, 2020, 14, 504-516.	0.9	23
28	Effects of microfracture and contact induced instabilities on the macroscopic response of finitely deformed elastic composites. Composites Part B: Engineering, 2016, 107, 233-253.	12.0	20
29	A detailed micro-model for brick masonry structures based on a diffuse cohesive-frictional interface fracture approach. Procedia Structural Integrity, 2020, 25, 334-347.	0.8	19
30	Investigation of mesh dependency issues in the simulation of crack propagation in quasiâ€brittle materials by using a diffuse interface modeling approach. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 801-820.	3.4	17
31	Nonlinear analysis of microscopic instabilities in fiber-reinforced composite materials. Procedia Structural Integrity, 2020, 25, 400-412.	0.8	13
32	Structural and seismic vulnerability assessment of the Santa Maria Assunta Cathedral in Catanzaro (Italy): classical and advanced approaches for the analysis of local and global failure mechanisms. Frattura Ed Integrita Strutturale, 2022, 16, 464-487.	0.9	8
33	Investigation of Microscopic Instabilities in Fiber-Reinforced Composite Materials by Using Multiscale Modeling Strategies. Lecture Notes in Mechanical Engineering, 2020, , 571-582.	0.4	6
34	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.	0.4	6
35	â€˜Explicitâ€™ and â€˜Implicitâ€™ Non-local Continuum Descriptions: Plate with Circular Hole. Springer Tracts in Mechanical Engineering, 2021, , 311-338.	0.3	4
36	Prediction of Microscopic Interface Crack Onset in Fiber-Reinforced Composites by Using a Multi-Scale Homogenization Procedure. Advanced Materials Research, 0, 875-877, 1032-1036.	0.3	1

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37	Finite element analysis of concrete cracking: a comparative study between a diffuse interface model and an embedded crack model. Procedia Structural Integrity, 2021, 33, 954-965.	0.8	1
38	Crack propagation analysis in masonry structures via an inter-element cohesive fracture approach: assessment of mesh dependency issues. Procedia Structural Integrity, 2022, 39, 638-648.	0.8	1
39	Cracking analysis in Ultra-High-Performance Fiber-Reinforced Concrete with embedded nanoparticles via a diffuse interface approach. Procedia Structural Integrity, 2022, 39, 688-699.	0.8	1
40	Debonding failure analysis of FRP-plated RC beams via an inter-element cohesive fracture approach. Procedia Structural Integrity, 2022, 39, 677-687.	0.8	1
41	A hybrid cohesive/volumetric multiscale finite element model for the failure analysis of fiber-reinforced composite structures. Procedia Structural Integrity, 2022, 41, 439-451.	0.8	1
42	A Concurrent Multiscale Model for Crack Propagation Analysis in Composite Materials. Springer Series in Solid and Structural Mechanics, 2017, , 125-142.	0.2	0
43	Stability analysis at the micro- and macro-scales in periodic bioinspired composites. Procedia Structural Integrity, 2021, 33, 1103-1114.	0.8	0
44	Numerical prediction of transverse cracking and delamination in fiber-reinforced laminates by using a two-scale cohesive finite element approach. Procedia Structural Integrity, 2021, 33, 1042-1054.	0.8	0
45	Cracking behavior analysis of reinforced concrete structures by using a cohesive fracture model. Procedia Structural Integrity, 2022, 41, 598-609.	0.8	0