# Fabrizio Greco

List of Publications by Year
in descending order



| 105 | 2,633 | 101384 | 223531 |
|---|---|---|---|
| papers | citations | 36 h-index | 46 g-index |

| 108 | 108 | 108 | 1119 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Continuum Damage-healing Mechanics with Application to Self-healing Composites. International Journal of Damage Mechanics, 2005, 14, 51-81. | 2.4 | 149 |
| 2 | Mixed mode delamination in plates: a refined approach. International Journal of Solids and Structures, 2001, 38, 9149-9177. | 1.3 | 113 |
| 3 | 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 |
| 4 | 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 |
| 5 | Mechanical behavior of bio-inspired nacre-like composites: A hybrid multiscale modeling approach. Composite Structures, 2020, 233, 111625. | 3.1 | 65 |
| 6 | A study of concrete cover separation failure in FRP-plated RC beams via an inter-element fracture approach. Composite Structures, 2019, 212, 625-636. | 3.1 | 57 |
| 7 | Damage evolution in bimodular laminated composites under cyclic loading. Composite Structures, 2001, 53, 381-402. | 3.1 | 53 |
| 8 | Sandwich panels under interfacial debonding mechanisms. Composite Structures, 2018, 203, 310-320. | 3.1 | 51 |
| 9 | Failure Analysis of Ultra High-Performance Fiber-Reinforced Concrete Structures Enhanced with Nanomaterials by Using a Diffuse Cohesive Interface Approach. Nanomaterials, 2020, 10, 1792. | 1.9 | 51 |
| 10 | A two-scale failure analysis of composite materials in presence of fiber/matrix crack initiation and propagation. Composite Structures, 2013, 95, 582-597. | 3.1 | 50 |
| 11 | Crack propagation analysis in composite materials by using moving mesh and multiscale techniques. Computers and Structures, 2015, 153, 201-216. | 2.4 | 48 |
| 12 | A coupled interface-multilayer approach for mixed mode delamination and contact analysis in laminated composites. International Journal of Solids and Structures, 2003, 40, 7245-7268. | 1.3 | 47 |
| 13 | A 3D delamination modelling technique based on plate and interface theories for laminated structures. European Journal of Mechanics, A/Solids, 2005, 24, 127-149. | 2.1 | 43 |
| 14 | An adaptive multiscale strategy for the damage analysis of masonry modeled as a composite material. Composite Structures, 2016, 153, 972-988. | 3.1 | 43 |
| 15 | 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. | 1.7 | 42 |
| 16 | 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. | 1.7 | 42 |
| 17 | An asymptotic analysis of delamination buckling and growth in layered plates. International Journal of Solids and Structures, 2000, 37, 6239-6276. | 1.3 | 41 |
| 18 | Delamination in composite plates: influence of shear deformability on interfacial debonding. Cement and Concrete Composites, 2001, 23, 33-45. | 4.6 | 41 |

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|---|---|---|---|
| 19 | Adaptive multiscale modeling of fiber-reinforced composite materials subjected to transverse microcracking. Composite Structures, 2014, 113, 249-263. | 3.1 | 41 |
| 20 | 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 |
| 21 | An analytical delamination model for laminated plates including bridging effects. International Journal of Solids and Structures, 2002, 39, 2435-2463. | 1.3 | 40 |
| 22 | A fracture-ALE formulation to predict dynamic debonding in FRP strengthened concrete beams. Composites Part B: Engineering, 2013, 46, 46-60. | 5.9 | 40 |
| 23 | 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 |
| 24 | Computation of Energy Release Rate and Mode Separation in Delaminated Composite Plates by Using Plate and Interface Variables. Mechanics of Advanced Materials and Structures, 2005, 12, 285-304. | 1.5 | 39 |
| 25 | A study of stability and bifurcation in micro-cracked periodic elastic composites including self-contact. International Journal of Solids and Structures, 2013, 50, 1646-1663. | 1.3 | 39 |
| 26 | 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 |
| 27 | Non-linear macroscopic response of fiber-reinforced composite materials due to initiation and propagation of interface cracks. Engineering Fracture Mechanics, 2012, 80, 92-113. | 2.0 | 38 |
| 28 | A novel approach based on ALE and delamination fracture mechanics for multilayered composite beams. Composites Part B: Engineering, 2015, 78, 447-458. | 5.9 | 38 |
| 29 | 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 |
| 30 | An analytical investigation of debonding problems in beams strengthened using composite plates. Engineering Fracture Mechanics, 2007, 74, 346-372. | 2.0 | 37 |
| 31 | Homogenized mechanical behavior of composite micro-structures including micro-cracking and contact evolution. Engineering Fracture Mechanics, 2009, 76, 182-208. | 2.0 | 37 |
| 32 | 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. | 2.1 | 37 |
| 33 | Dynamic impact analysis of long span cable-stayed bridges under moving loads. Engineering Structures, 2008, 30, 1160-1177. | 2.6 | 36 |
| 34 | Mixed mode dynamic delamination in fiber reinforced composites. Composites Part B: Engineering, 2009, 40, 379-392. | 5.9 | 36 |
| 35 | Nonlinear homogenized properties of defected composite materials. Computers and Structures, 2014, 134, 102-111. | 2.4 | 36 |
| 36 | A moving interface finite element formulation for layered structures. Composites Part B: Engineering, 2016, 96, 325-337. | 5.9 | 36 |

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| 37 | Dynamic Mode I and Mode II Crack Propagation in Fiber Reinforced Composites. Mechanics of Advanced Materials and Structures, 2009, 16, 442-455. | 1.5 | 35 |
| 38 | Modelling of mixed mode debonding in externally FRP reinforced beams. Composites Science and Technology, 2007, 67, 1459-1474. | 3.8 | 34 |
| 39 | Nonlinear effects in fracture induced failure of compressively loaded fiber reinforced composites. Composite Structures, 2018, 189, 688-699. | 3.1 | 34 |
| 40 | 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 |
| 41 | Influence of micro-cracking and contact on the effective properties of composite materials. Simulation Modelling Practice and Theory, 2008, 16, 861-884. | 2.2 | 33 |
| 42 | 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 |
| 43 | Crack propagation under thermo-mechanical loadings based on moving mesh strategy. Theoretical and Applied Fracture Mechanics, 2021, 114, 103033. | 2.1 | 32 |
| 44 | Nonlinear compressive failure analysis of biaxially loaded fiber reinforced materials. Composites Part B: Engineering, 2018, 147, 240-251. | 5.9 | 31 |
| 45 | A moving mesh FE methodology for vehicleâ€“bridge interaction modeling. Mechanics of Advanced Materials and Structures, 2020, 27, 1256-1268. | 1.5 | 30 |
| 46 | Dynamic Analysis of Cable-Stayed Bridges Affected by Accidental Failure Mechanisms under Moving Loads. Mathematical Problems in Engineering, 2013, 2013, 1-20. | 0.6 | 29 |
| 47 | An investigation on microscopic and macroscopic stability phenomena of composite solids with periodic microstructure. International Journal of Solids and Structures, 2010, 47, 2806-2824. | 1.3 | 27 |
| 48 | Macro- and micro-instabilities in incompressible bioinspired composite materials with nacre-like microstructure. Composite Structures, 2021, 269, 114004. | 3.1 | 27 |
| 49 | A cohesive fracture model for predicting crack spacing and crack width in reinforced concrete structures. Engineering Failure Analysis, 2022, 139, 106452. | 1.8 | 27 |
| 50 | 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. | 2.1 | 25 |
| 51 | Band gap tuning through microscopic instabilities of compressively loaded lightened nacre-like composite metamaterials. Composite Structures, 2022, 282, 115032. | 3.1 | 24 |
| 52 | Multi-layer modeling of edge debonding in strengthened beams using interface stresses and fracture energies. Engineering Structures, 2016, 109, 26-42. | 2.6 | 22 |
| 53 | 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 |
| 54 | Dynamic crack growth based on moving mesh method. Composites Part B: Engineering, 2019, 174, 107053. | 5.9 | 21 |

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| 55 | Fracture toughness characterisation of a glass fibreâ€reinforced plastic composite. Fatigue and Fracture of Engineering Materials and Structures, 2021, 44, 3-13. | 1.7 | 21 |
| 56 | A Parametric Study on the Dynamic Behavior of Combined Cable-Stayed and Suspension Bridges under Moving Loads. International Journal for Computational Methods in Engineering Science and Mechanics, 2009, 10, 243-258. | 1.4 | 20 |
| 57 | 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 |
| 58 | 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 |
| 59 | A numerical model based on ALE formulation to predict crack propagation in sandwich structures. Frattura Ed Integrita Strutturale, 2019, 13, 277-293. | 0.5 | 18 |
| 60 | 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. | 1.7 | 17 |
| 61 | Numerical formulation based on moving mesh method for vehicleâ€“bridge interaction. Advances in Engineering Software, 2018, 121, 75-83. | 1.8 | 16 |
| 62 | 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 |
| 63 | Nonlinear analysis of microscopic instabilities in fiber-reinforced composite materials. Procedia Structural Integrity, 2020, 25, 400-412. | 0.3 | 13 |
| 64 | Dynamic fracture analysis in quasi-brittle materials via a finite element approach based on the combination of the ALE formulation and Mâˆ’integral method. Engineering Failure Analysis, 2022, 141, 106627. | 1.8 | 13 |
| 65 | A cohesive finite element model based ALE formulation for z-pins reinforced multilayered composite beams. Procedia Structural Integrity, 2016, 2, 452-459. | 0.3 | 11 |
| 66 | Dynamic debonding in layered structures: a coupled ALE-cohesive approach. Frattura Ed Integrita Strutturale, 2017, 11, 524-535. | 0.5 | 11 |
| 67 | An Investigation on Static and Dynamic Criteria of Constitutive Stability. Mechanics of Advanced Materials and Structures, 2007, 14, 347-363. | 1.5 | 9 |
| 68 | Interaction Between Interlaminar and Intralaminar Damage in Fiber-Reinforced Composite Laminates. International Journal for Computational Methods in Engineering Science and Mechanics, 2008, 9, 358-373. | 1.4 | 9 |
| 69 | A novel procedure for damage evaluation of fillet-welded joints. International Journal of Fatigue, 2020, 136, 105599. | 2.8 | 8 |
| 70 | 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. | 0.5 | 8 |
| 71 | Energy release rate and mode partition for interlaminar crack in circular laminated beams. International Journal of Solids and Structures, 2006, 43, 1201-1223. | 1.3 | 7 |
| 72 | Validation of Homogenization Techniques for Locally Periodic Fiber-Reinforced Composites with Interfacial Debonding. Mechanics of Advanced Materials and Structures, 2013, 20, 638-651. | 1.5 | 7 |

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| 73 | A coupled ALE-Cohesive formulation for layered structural systems. Procedia Structural Integrity, 2017, 3, 362-369. | 0.3 | 6 |
| 74 | An investigation on the structural integrity of network arch bridges subjected to cable loss under the action of moving loads. Procedia Structural Integrity, 2020, 25, 305-315. | 0.3 | 6 |
| 75 | Investigation of Microscopic Instabilities in Fiber-Reinforced Composite Materials by Using Multiscale Modeling Strategies. Lecture Notes in Mechanical Engineering, 2020, , 571-582. | 0.3 | 6 |
| 76 | 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 |
| 77 | A dynamic model to predict crack propagation in z-pinned composite structures. Annals of Solid and Structural Mechanics, 2011, 2, 143-157. | 0.5 | 5 |
| 78 | A coupled ALE-Cohesive formulation for interfacial debonding propagation in sandwich structures. Procedia Structural Integrity, 2018, 9, 92-100. | 0.3 | 5 |
| 79 | Structural integrity of tied arch bridges affected by instability phenomena. Procedia Structural Integrity, 2019, 18, 891-902. | 0.3 | 5 |
| 80 | Crack growth propagation modeling based on moving mesh method and interaction integral approach. Procedia Structural Integrity, 2020, 28, 1981-1991. | 0.3 | 5 |
| 81 | Numerical modeling based on moving mesh method to simulate fast crack propagation. Frattura Ed Integrita Strutturale, 2020, 14, 410-422. | 0.5 | 4 |
| 82 | A 3D nonlinear static analysis of long-span cable stayed bridges. Annals of Solid and Structural Mechanics, 2013, 5, 15-34. | 0.5 | 3 |
| 83 | An Experimental and Numerical Study to Evaluate the Crack Path Under Mixed Mode Loading on PVC Foams. Lecture Notes in Mechanical Engineering, 2020, , 378-388. | 0.3 | 3 |
| 84 | 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 |
| 85 | Edge Debonding Prediction in Beams Strengthened by FRP Composite Plates. Springer Series in Solid and Structural Mechanics, 2017, , 105-124. | 0.2 | 2 |
| 86 | On the combination of Moving Mesh technique and M-integral method for predicting crack propagation mechanisms in Functionally Graded Materials. Procedia Structural Integrity, 2022, 39, 649-662. | 0.3 | 2 |
| 87 | An efficient model of mixed-mode delamination in laminated composites including bridging mechanisms. Simulation Modelling Practice and Theory, 2003, 11, 465-481. | 2.2 | 1 |
| 88 | 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 |
| 89 | 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. | 0.3 | 1 |
| 90 | 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. | 0.3 | 1 |

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| 91 | Cracking analysis in Ultra-High-Performance Fiber-Reinforced Concrete with embedded nanoparticles via a diffuse interface approach. Procedia Structural Integrity, 2022, 39, 688-699. | 0.3 | 1 |
| 92 | Debonding failure analysis of FRP-plated RC beams via an inter-element cohesive fracture approach. Procedia Structural Integrity, 2022, 39, 677-687. | 0.3 | 1 |
| 93 | A hybrid cohesive/volumetric multiscale finite element model for the failure analysis of fiber-reinforced composite structures. Procedia Structural Integrity, 2022, 41, 439-451. | 0.3 | 1 |
| 94 | Strategies to improve the structural integrity of tied-arch bridges affected by instability phenomena. Procedia Structural Integrity, 2020, 25, 454-464. | 0.3 | 0 |
| 95 | Macroscopic Stability Analysis in Periodic Composite Solids. Advanced Structured Materials, 2010, , 213-242. | 0.3 | 0 |
| 96 | Dynamic Crack Propagation in Composite Structures. Advanced Structured Materials, 2010, , 57-81. | 0.3 | 0 |
| 97 | Influence of the Incremental Constitutive Law on Tensile Instability Phenomena. Lecture Notes in Applied and Computational Mechanics, 2012, , 343-362. | 2.0 | 0 |
| 98 | A Concurrent Multiscale Model for Crack Propagation Analysis in Composite Materials. Springer Series in Solid and Structural Mechanics, 2017, , 125-142. | 0.2 | 0 |
| 99 | La narraciÃ³n de los datos estadÃsticos como subestimaciÃ³n de la vÃctima oriental en la geografÃa nominal. Relaciones Internacionales, 2019, , 21-36. | 0.2 | 0 |
| 100 | Stability analysis at the micro- and macro-scales in periodic bioinspired composites. Procedia Structural Integrity, 2021, 33, 1103-1114. | 0.3 | 0 |
| 101 | An effective modeling approach based on the ALE and M-integral for simulating crack propagation under thermo-mechanical loadings. Procedia Structural Integrity, 2021, 33, 858-870. | 0.3 | 0 |
| 102 | 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. | 0.3 | 0 |
| 103 | Cracking behavior analysis of reinforced concrete structures by using a cohesive fracture model. Procedia Structural Integrity, 2022, 41, 598-609. | 0.3 | 0 |
| 104 | Simulation of dynamic fracture in quasi-brittle materials using a finite element modeling approach enhanced by moving mesh technique and interaction integral method. Procedia Structural Integrity, 2022, 41, 576-588. | 0.3 | 0 |
| 105 | A Cohesive fracture approach for the nonlinear analysis of load-induced degradation of vibration characteristics in RC beams. Procedia Structural Integrity, 2022, 41, 618-630. | 0.3 | 0 |