# Albert Turon

List of Publications by Year
in descending order

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|---|---|---|---|
| 85<br>papers | 5,741<br>citations | 147566<br>31<br>h-index | 74018<br>75<br>g-index |
| 88<br>all docs | 88<br>docs citations | 88<br>times ranked | 3164<br>citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | An engineering solution for mesh size effects in the simulation of delamination using cohesive zone models. Engineering Fracture Mechanics, 2007, 74, 1665-1682. | 2.0 | 1,212 |
| 2 | A damage model for the simulation of delamination in advanced composites under variable-mode loading. Mechanics of Materials, 2006, 38, 1072-1089. | 1.7 | 722 |
| 3 | Accurate simulation of delamination growth under mixed-mode loading using cohesive elements: Definition of interlaminar strengths and elastic stiffness. Composite Structures, 2010, 92, 1857-1864. | 3.1 | 367 |
| 4 | Experimental study of bond behaviour between concrete and FRP bars using a pull-out test. Composites Part B: Engineering, 2009, 40, 784-797. | 5.9 | 325 |
| 5 | Simulation of delamination in composites under high-cycle fatigue. Composites Part A: Applied Science and Manufacturing, 2007, 38, 2270-2282. | 3.8 | 312 |
| 6 | Simulation of drop-weight impact and compression after impact tests on composite laminates. Composite Structures, 2012, 94, 3364-3378. | 3.1 | 264 |
| 7 | Determination of the critical size of a statistical representative volume element (SRVE) for carbon reinforced polymersâˆ†. Acta Materialia, 2006, 54, 3471-3484. | 3.8 | 200 |
| 8 | An experimental study of the flexural behaviour of GFRP RC beams and comparison with prediction models. Composite Structures, 2009, 91, 286-295. | 3.1 | 125 |
| 9 | Delamination Under Fatigue Loads in Composite Laminates: A Review on the Observed Phenomenology and Computational Methods. Applied Mechanics Reviews, 2014, 66, . | 4.5 | 121 |
| 10 | A phase field approach to simulate intralaminar and translaminar fracture in long fiber composite materials. Composite Structures, 2019, 220, 899-911. | 3.1 | 92 |
| 11 | Effective Simulation of Delamination in Aeronautical Structures Using Shells and Cohesive Elements. Journal of Aircraft, 2008, 45, 663-672. | 1.7 | 80 |
| 12 | Accurate simulation of delamination under mixed-mode loading using a cohesive model with a mode-dependent penalty stiffness. Composite Structures, 2018, 184, 506-511. | 3.1 | 70 |
| 13 | Damage occurrence at edges of non-crimp-fabric thin-ply laminates under off-axis uniaxial loading. Composites Science and Technology, 2014, 98, 44-50. | 3.8 | 67 |
| 14 | An experimental study on matrix crack induced delamination in composite laminates. Composite Structures, 2015, 127, 10-17. | 3.1 | 65 |
| 15 | A simulation method for highâ€cycle fatigueâ€driven delamination using a cohesive zone model. International Journal for Numerical Methods in Engineering, 2016, 106, 163-191. | 1.5 | 65 |
| 16 | Matrix cracking and delamination in laminated composites. Part I: Ply constitutive law, first ply failure and onset of delamination. Mechanics of Materials, 2011, 43, 169-185. | 1.7 | 60 |
| 17 | Cohesive zone length of orthotropic materials undergoing delamination. Engineering Fracture Mechanics, 2016, 159, 174-188. | 2.0 | 58 |
| 18 | Variable-stiffness composite panels: As-manufactured modeling and its influence on the failure behavior. Composites Part B: Engineering, 2014, 56, 660-669. | 5.9 | 54 |

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|---|---|---|---|
| 19 | A phase field approach enhanced with a cohesive zone model for modeling delamination induced by matrix cracking. Computer Methods in Applied Mechanics and Engineering, 2020, 358, 112618. | 3.4 | 53 |
| 20 | Bond behaviour between recycled aggregate concrete and glass fibre reinforced polymer bars. Construction and Building Materials, 2016, 106, 449-460. | 3.2 | 51 |
| 21 | On the validity of linear elastic fracture mechanics methods to measure the fracture toughness of adhesive joints. International Journal of Solids and Structures, 2016, 81, 110-116. | 1.3 | 50 |
| 22 | Mechanics of hybrid polymer composites: analytical and computational study. Computational Mechanics, 2016, 57, 405-421. | 2.2 | 49 |
| 23 | Assessment of energy dissipation during mixed-mode delamination growth using cohesive zone models. Composites Part A: Applied Science and Manufacturing, 2012, 43, 2128-2136. | 3.8 | 48 |
| 24 | An experimental analysis of the fracture behavior of composite bonded joints in terms of cohesive laws. Composites Part A: Applied Science and Manufacturing, 2016, 90, 234-242. | 3.8 | 45 |
| 25 | An experimental data reduction method for the Mixed Mode Bending test based on the J-integral approach. Composites Science and Technology, 2015, 117, 85-91. | 3.8 | 44 |
| 26 | Experimental study of immediate and time-dependent deflections of GFRP reinforced concrete beams. Composite Structures, 2013, 96, 279-285. | 3.1 | 43 |
| 27 | An energy based failure criterion for matrix crack induced delamination in laminated composite structures. Composite Structures, 2014, 112, 339-344. | 3.1 | 41 |
| 28 | Improving damage resistance and load capacity of thin-ply laminates using ply clustering and small mismatch angles. Composites Part A: Applied Science and Manufacturing, 2019, 117, 76-91. | 3.8 | 41 |
| 29 | A progressive damage model for unidirectional fibre-reinforced composites based on fibre fragmentation. Part I: Formulation. Composites Science and Technology, 2005, 65, 2039-2048. | 3.8 | 39 |
| 30 | A 3D Progressive Failure Model for predicting pseudo-ductility in hybrid unidirectional composite materials under fibre tensile loading. Composites Part A: Applied Science and Manufacturing, 2018, 107, 579-591. | 3.8 | 38 |
| 31 | A benchmark study of simulation methods for high-cycle fatigue-driven delamination based on cohesive zone models. Composite Structures, 2017, 164, 198-206. | 3.1 | 35 |
| 32 | Effect of material properties on long-term deflections of GFRP reinforced concrete beams. Construction and Building Materials, 2013, 41, 99-108. | 3.2 | 33 |
| 33 | Matrix cracking and delamination in laminated composites. Part II: Evolution of crack density and delamination. Mechanics of Materials, 2011, 43, 194-211. | 1.7 | 30 |
| 34 | Using acoustic emissions (AE) to monitor mode I crack growth in bonded joints. Engineering Fracture Mechanics, 2020, 224, 106778. | 2.0 | 29 |
| 35 | Short and long-term cracking behaviour of GFRP reinforced concrete beams. Composites Part B: Engineering, 2015, 77, 223-231. | 5.9 | 28 |
| 36 | A 3D transversally isotropic constitutive model for advanced composites implemented in a high performance computing code. European Journal of Mechanics, A/Solids, 2018, 71, 278-291. | 2.1 | 28 |

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| 37 | A simulation method for fatigue-driven delamination in layered structures involving non-negligible fracture process zones and arbitrarily shaped crack fronts. Composites Part A: Applied Science and Manufacturing, 2019, 122, 107-119. | 3.8 | 28 |
| 38 | Finite-thickness cohesive elements for modeling thick adhesives. Engineering Fracture Mechanics, 2016, 168, 105-113. | 2.0 | 27 |
| 39 | An evaluation of mode-decomposed energy release rates for arbitrarily shaped delamination fronts using cohesive elements. Computer Methods in Applied Mechanics and Engineering, 2019, 347, 218-237. | 3.4 | 27 |
| 40 | Detailed experimental validation and benchmarking of six models for longitudinal tensile failure of unidirectional composites. Composite Structures, 2022, 279, 114828. | 3.1 | 27 |
| 41 | Experimental study and code predictions of fibre reinforced polymer reinforced concrete (FRP RC) tensile members. Composite Structures, 2011, 93, 2511-2520. | 3.1 | 26 |
| 42 | A general analytical model based on elastic foundation beam theory for adhesively bonded DCB joints either with flexible or rigid adhesives. International Journal of Solids and Structures, 2016, 94-95, 21-34. | 1.3 | 26 |
| 43 | Effective simulation of the mechanics of longitudinal tensile failure of unidirectional polymer composites. International Journal of Fracture, 2017, 208, 269-285. | 1.1 | 26 |
| 44 | An efficient methodology for the experimental characterization of mode II delamination growth under fatigue loading. International Journal of Fatigue, 2017, 95, 185-193. | 2.8 | 26 |
| 45 | Point-wise evaluation of the growth driving direction for arbitrarily shaped delamination fronts using cohesive elements. European Journal of Mechanics, A/Solids, 2018, 72, 464-482. | 2.1 | 26 |
| 46 | Progressive failure analysis of DCB bonded joints using a new elastic foundation coupled with a cohesive damage model. European Journal of Mechanics, A/Solids, 2017, 63, 22-35. | 2.1 | 25 |
| 47 | A benchmark test for validating 3D simulation methods for delamination growth under quasi-static and fatigue loading. Composite Structures, 2019, 210, 932-941. | 3.1 | 24 |
| 48 | A quick procedure to predict free-edge delamination in thin-ply laminates under tension. Engineering Fracture Mechanics, 2016, 168, 28-39. | 2.0 | 23 |
| 49 | Analysis of cracking behaviour and tension stiffening in FRP reinforced concrete tensile elements. Composites Part B: Engineering, 2013, 45, 1360-1367. | 5.9 | 22 |
| 50 | A non-linear hyperelastic foundation beam theory model for double cantilever beam tests with thick flexible adhesive. International Journal of Solids and Structures, 2016, 80, 19-27. | 1.3 | 22 |
| 51 | Virtual calculation of the B-value allowables of notched composite laminates. Composite Structures, 2019, 212, 11-21. | 3.1 | 22 |
| 52 | A thermoâ€“mechanical cyclic cohesive zone model for variable amplitude loading and mixedâ€“mode behavior. International Journal of Solids and Structures, 2019, 159, 257-271. | 1.3 | 21 |
| 53 | A continuum damage model for composite laminates: Part IV- Experimental and numerical tests. Mechanics of Materials, 2021, 154, 103686. | 1.7 | 21 |
| 54 | A dynamic spring element model for the prediction of longitudinal failure of polymer composites. Computational Materials Science, 2019, 160, 42-52. | 1.4 | 19 |

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| 55 | In-situ strength effects in long fibre reinforced composites: A micro-mechanical analysis using the phase field approach of fracture. Theoretical and Applied Fracture Mechanics, 2020, 108, 102621. | 2.1 | 19 |
| 56 | Numerical simulation of two-dimensional in-plane crack propagation in FRP laminates. Composite Structures, 2018, 200, 396-407. | 3.1 | 18 |
| 57 | A simplified method to obtain time-dependent curvatures and deflections of concrete members reinforced with FRP bars. Composite Structures, 2010, 92, 1833-1838. | 3.1 | 17 |
| 58 | The influence of mode II test configuration on the cohesive law of bonded joints. Composite Structures, 2020, 234, 111689. | 3.1 | 16 |
| 59 | A progressive damage model for unidirectional fibre-reinforced composites based on fibre fragmentation. Part II: Stiffness reduction in environment sensitive fibres under fatigue. Composites Science and Technology, 2005, 65, 2269-2275. | 3.8 | 14 |
| 60 | An efficient method to extract a mode I cohesive law for bonded joints using the double cantilever beam test. Composites Part B: Engineering, 2019, 178, 107424. | 5.9 | 14 |
| 61 | Effect of environmental conditioning on pure mode I fracture behaviour of adhesively bonded joints. Theoretical and Applied Fracture Mechanics, 2020, 110, 102826. | 2.1 | 14 |
| 62 | Blind benchmarking of seven longitudinal tensile failure models for two virtual unidirectional composites. Composites Science and Technology, 2021, 202, 108555. | 3.8 | 14 |
| 63 | An exact solution for the determination of the mode mixture in the mixed-mode bending delamination test. Composites Science and Technology, 2006, 66, 1256-1258. | 3.8 | 13 |
| 64 | Experimental methodology for obtaining fatigue crack growth rate curves in mixed-mode I-II by means of variable cyclic displacement tests. International Journal of Fatigue, 2018, 110, 63-70. | 2.8 | 12 |
| 65 | A rational method to predict long-term deflections of FRP reinforced concrete members. Engineering Structures, 2012, 40, 230-239. | 2.6 | 11 |
| 66 | Experimental and numerical evaluation of conduction welded thermoplastic composite joints. Composite Structures, 2022, 281, 114964. | 3.1 | 11 |
| 67 | Environmental effects on the cohesive laws of the composite bonded joints. Composites Part A: Applied Science and Manufacturing, 2022, 155, 106798. | 3.8 | 11 |
| 68 | Effect of the width-to-thickness ratio on the mode I fracture toughness of flexible bonded joints. Engineering Fracture Mechanics, 2019, 218, 106584. | 2.0 | 10 |
| 69 | Effect of environment conditioning on mode II fracture behaviour of adhesively bonded joints. Theoretical and Applied Fracture Mechanics, 2021, 112, 102912. | 2.1 | 10 |
| 70 | Analytical model for predicting the tensile strength of unidirectional composites based on the density of fiber breaks. Composites Part B: Engineering, 2018, 141, 84-91. | 5.9 | 9 |
| 71 | Numerically-based method for fracture characterization of Mode I-dominated two-dimensional delamination in FRP laminates. Composite Structures, 2019, 214, 143-152. | 3.1 | 9 |
| 72 | Failure of hybrid composites under longitudinal tension: Influence of dynamic effects and thermal residual stresses. Composite Structures, 2020, 233, 111732. | 3.1 | 9 |

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| 73 | A methodology to obtain material design allowables from high-fidelity compression after impact simulations on composite laminates. Composites Part A: Applied Science and Manufacturing, 2020, 139, 106069. | 3.8 | 9 |
| 74 | Effects of local stress fields around broken fibres on the longitudinal failure of composite materials. International Journal of Solids and Structures, 2019, 156-157, 294-305. | 1.3 | 8 |
| 75 | A virtual testing based search for optimum compression after impact strength in thin laminates using ply-thickness hybridization and unsymmetrical designs. Composites Science and Technology, 2020, 196, 108188. | 3.8 | 8 |
| 76 | An analytical model to predict stress fields around broken fibres and their effect on the longitudinal failure of hybrid composites. Composite Structures, 2019, 211, 564-576. | 3.1 | 7 |
| 77 | Mode I fracture characterisation of rigid and flexible bonded joints using an advanced Wedge-Driven Test. Mechanics of Materials, 2020, 148, 103534. | 1.7 | 7 |
| 78 | Mode I fatigue behaviour and fracture of adhesively-bonded fibre-reinforced polymer (FRP) composite joints for structural repairs. , 2015, , 121-147. | | 6 |
| 79 | Durability study of flexible bonded joints: The effect of sustained loads in mode I fracture tests. Polymer Testing, 2020, 88, 106570. | 2.3 | 6 |
| 80 | Crack propagation in quasi-brittle two-dimensional isotropic lattices. Engineering Fracture Mechanics, 2011, 78, 60-70. | 2.0 | 5 |
| 81 | Delamination propagation under cyclic loading. , 2008, , 485-513. | | 4 |
| 82 | Size effects in hybrid unidirectional polymer composites under longitudinal tension: A micromechanical investigation. Composites Part A: Applied Science and Manufacturing, 2021, 140, 106186. | 3.8 | 4 |
| 83 | Mesoscale modelling of delamination using the cohesive zone model approach. , 2021, , 555-577. | | 3 |
| 84 | Interface elements for fatigue-driven delaminations in advanced composite materials. , 2015, , 73-91. | | 2 |
| 85 | 8.8 Analysis of Delamination Damage in Composite Structures Using Cohesive Elements. , 2018, , 136-156. | | 1 |