Albert Turon

List of Publications by Year
in descending order

85 papers	5,741 citations	147801 31 h-index	74163 75 g-index
88 all docs	88 docs citations	88 times ranked	3164 citing authors

#	Article	IF	Citations
1	Detailed experimental validation and benchmarking of six models for longitudinal tensile failure of unidirectional composites. Composite Structures, 2022, 279, 114828.	5.8	27
2	Experimental and numerical evaluation of conduction welded thermoplastic composite joints. Composite Structures, 2022, 281, 114964.	5.8	11
3	Environmental effects on the cohesive laws of the composite bonded joints. Composites Part A: Applied Science and Manufacturing, 2022, 155, 106798.	7.6	11
4	Blind benchmarking of seven longitudinal tensile failure models for two virtual unidirectional composites. Composites Science and Technology, 2021, 202, 108555.	7.8	14
5	A continuum damage model for composite laminates: Part IV- Experimental and numerical tests. Mechanics of Materials, 2021, 154, 103686.	3.2	21
6	Size effects in hybrid unidirectional polymer composites under longitudinal tension: A micromechanical investigation. Composites Part A: Applied Science and Manufacturing, 2021, 140, 106186.	7.6	4
7	Mesoscale modelling of delamination using the cohesive zone model approach. , 2021, , 555-577.		3
8	Effect of environment conditioning on mode II fracture behaviour of adhesively bonded joints. Theoretical and Applied Fracture Mechanics, 2021, 112, 102912.	4.7	10
9	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.	6.6	53
10	The influence of mode II test configuration on the cohesive law of bonded joints. Composite Structures, 2020, 234, 111689.	5.8	16
11	Using acoustic emissions (AE) to monitor mode I crack growth in bonded joints. Engineering Fracture Mechanics, 2020, 224, 106778.	4.3	29
12	Failure of hybrid composites under longitudinal tension: Influence of dynamic effects and thermal residual stresses. Composite Structures, 2020, 233, 111732.	5.8	9
13	Effect of environmental conditioning on pure mode I fracture behaviour of adhesively bonded joints. Theoretical and Applied Fracture Mechanics, 2020, 110, 102826.	4.7	14
14	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.	7.6	9
15	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.	7.8	8
16	Durability study of flexible bonded joints: The effect of sustained loads in mode I fracture tests. Polymer Testing, 2020, 88, 106570.	4.8	6
17	Mode I fracture characterisation of rigid and flexible bonded joints using an advanced Wedge-Driven Test. Mechanics of Materials, 2020, 148, 103534.	3.2	7
18	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.	4.7	19

#	Article	IF	Citations
19	Effect of the width-to-thickness ratio on the mode I fracture toughness of flexible bonded joints. Engineering Fracture Mechanics, 2019, 218, 106584.	4.3	10
20	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.	12.0	14
21	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.	7.6	28
22	A phase field approach to simulate intralaminar and translaminar fracture in long fiber composite materials. Composite Structures, 2019, 220, 899-911.	5.8	92
23	Numerically-based method for fracture characterization of Mode I-dominated two-dimensional delamination in FRP laminates. Composite Structures, 2019, 214, 143-152.	5.8	9
24	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.	2.7	8
25	Virtual calculation of the B-value allowables of notched composite laminates. Composite Structures, 2019, 212, 11-21.	5.8	22
26	A benchmark test for validating 3D simulation methods for delamination growth under quasi-static and fatigue loading. Composite Structures, 2019, 210, 932-941.	5.8	24
27	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.	5.8	7
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.	7.6	41
29	A dynamic spring element model for the prediction of longitudinal failure of polymer composites. Computational Materials Science, 2019, 160, 42-52.	3.0	19
30	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.	6.6	27
31	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.	2.7	21
32	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.	7.6	38
33	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.	5.7	12
34	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.	12.0	9
35	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.	3.7	28
36	Accurate simulation of delamination under mixed-mode loading using a cohesive model with a mode-dependent penalty stiffness. Composite Structures, 2018, 184, 506-511.	5.8	70

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37	Numerical simulation of two-dimensional in-plane crack propagation in FRP laminates. Composite Structures, 2018, 200, 396-407.	5.8	18
38	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.	3.7	26
39	8.8 Analysis of Delamination Damage in Composite Structures Using Cohesive Elements. , 2018, , 136-156.		1
40	A benchmark study of simulation methods for high-cycle fatigue-driven delamination based on cohesive zone models. Composite Structures, 2017, 164, 198-206.	5.8	35
41	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.	3.7	25
42	Effective simulation of the mechanics of longitudinal tensile failure of unidirectional polymer composites. International Journal of Fracture, 2017, 208, 269-285.	2.2	26
43	An efficient methodology for the experimental characterization of mode II delamination growth under fatigue loading. International Journal of Fatigue, 2017, 95, 185-193.	5.7	26
44	Cohesive zone length of orthotropic materials undergoing delamination. Engineering Fracture Mechanics, 2016, 159, 174-188.	4.3	58
45	A quick procedure to predict free-edge delamination in thin-ply laminates under tension. Engineering Fracture Mechanics, 2016, 168, 28-39.	4.3	23
46	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.	7.6	45
47	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.	2.7	26
48	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.	2.8	65
49	Mechanics of hybrid polymer composites: analytical and computational study. Computational Mechanics, 2016, 57, 405-421.	4.0	49
50	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.	2.7	50
51	Bond behaviour between recycled aggregate concrete and glass fibre reinforced polymer bars. Construction and Building Materials, 2016, 106, 449-460.	7.2	51
52	Finite-thickness cohesive elements for modeling thick adhesives. Engineering Fracture Mechanics, 2016, 168, 105-113.	4.3	27
53	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.	2.7	22
54	Interface elements for fatigue-driven delaminations in advanced composite materials. , 2015, , 73-91.		2

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55	Mode I fatigue behaviour and fracture of adhesively-bonded fibre-reinforced polymer (FRP) composite joints for structural repairs. , 2015, , 121-147.		6
56	An experimental study on matrix crack induced delamination in composite laminates. Composite Structures, 2015, 127, 10-17.	5.8	65
57	Short and long-term cracking behaviour of GFRP reinforced concrete beams. Composites Part B: Engineering, 2015, 77, 223-231.	12.0	28
58	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.	7.8	44
59	Delamination Under Fatigue Loads in Composite Laminates: A Review on the Observed Phenomenology and Computational Methods. Applied Mechanics Reviews, 2014, 66, .	10.1	121
60	Variable-stiffness composite panels: As-manufactured modeling and its influence on the failure behavior. Composites Part B: Engineering, 2014, 56, 660-669.	12.0	54
61	An energy based failure criterion for matrix crack induced delamination in laminated composite structures. Composite Structures, 2014, 112, 339-344.	5.8	41
62	Damage occurrence at edges of non-crimp-fabric thin-ply laminates under off-axis uniaxial loading. Composites Science and Technology, 2014, 98, 44-50.	7.8	67
63	Effect of material properties on long-term deflections of GFRP reinforced concrete beams. Construction and Building Materials, 2013, 41, 99-108.	7.2	33
64	Analysis of cracking behaviour and tension stiffening in FRP reinforced concrete tensile elements. Composites Part B: Engineering, 2013, 45, 1360-1367.	12.0	22
65	Experimental study of immediate and time-dependent deflections of GFRP reinforced concrete beams. Composite Structures, 2013, 96, 279-285.	5.8	43
66	Simulation of drop-weight impact and compression after impact tests on composite laminates. Composite Structures, 2012, 94, 3364-3378.	5.8	264
67	Assessment of energy dissipation during mixed-mode delamination growth using cohesive zone models. Composites Part A: Applied Science and Manufacturing, 2012, 43, 2128-2136.	7.6	48
68	A rational method to predict long-term deflections of FRP reinforced concrete members. Engineering Structures, 2012, 40, 230-239.	5.3	11
69	Experimental study and code predictions of fibre reinforced polymer reinforced concrete (FRP RC) tensile members. Composite Structures, 2011, 93, 2511-2520.	5.8	26
70	Crack propagation in quasi-brittle two-dimensional isotropic lattices. Engineering Fracture Mechanics, 2011, 78, 60-70.	4.3	5
71	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.	3.2	60
72	Matrix cracking and delamination in laminated composites. Part II: Evolution of crack density and delamination. Mechanics of Materials, 2011, 43, 194-211.	3.2	30

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73	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.	5.8	367
74	A simplified method to obtain time-dependent curvatures and deflections of concrete members reinforced with FRP bars. Composite Structures, 2010, 92, 1833-1838.	5.8	17
75	Experimental study of bond behaviour between concrete and FRP bars using a pull-out test. Composites Part B: Engineering, 2009, 40, 784-797.	12.0	325
76	An experimental study of the flexural behaviour of GFRP RC beams and comparison with prediction models. Composite Structures, 2009, 91, 286-295.	5.8	125
77	Effective Simulation of Delamination in Aeronautical Structures Using Shells and Cohesive Elements. Journal of Aircraft, 2008, 45, 663-672.	2.4	80
78	Delamination propagation under cyclic loading. , 2008, , 485-513.		4
79	Simulation of delamination in composites under high-cycle fatigue. Composites Part A: Applied Science and Manufacturing, 2007, 38, 2270-2282.	7.6	312
80	An engineering solution for mesh size effects in the simulation of delamination using cohesive zone models. Engineering Fracture Mechanics, 2007, 74, 1665-1682.	4.3	1,212
81	Determination of the critical size of a statistical representative volume element (SRVE) for carbon reinforced polymersâ˜†. Acta Materialia, 2006, 54, 3471-3484.	7.9	200
82	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.	7.8	13
83	A damage model for the simulation of delamination in advanced composites under variable-mode loading. Mechanics of Materials, 2006, 38, 1072-1089.	3.2	722
84	A progressive damage model for unidirectional fibre-reinforced composites based on fibre fragmentation. Part I: Formulation. Composites Science and Technology, 2005, 65, 2039-2048.	7.8	39
85	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.	7.8	14