Robin Olsson

List of Publications by Year
in descending order

50 papers	2,130 citations	304743 22 h-index	223800 46 g-index
51 all docs	51 docs citations	51 times ranked	1309 citing authors

#	Article	IF	Citations
1	Mass criterion for wave controlled impact response of composite plates. Composites Part A: Applied Science and Manufacturing, 2000, 31, 879-887.	7.6	241
2	Impact on composite structures. Aeronautical Journal, 2004, 108, 541-563.	1.6	194
3	Analytical prediction of large mass impact damage in composite laminates. Composites Part A: Applied Science and Manufacturing, 2001, 32, 1207-1215.	7.6	188
4	Delamination threshold load for dynamic impact on plates. International Journal of Solids and Structures, 2006, 43, 3124-3141.	2.7	134
5	Using digital image correlation to determine bone surface strains during loading and after adaptation of the mouse tibia. Journal of Biomechanics, 2010, 43, 599-605.	2.1	131
6	Impact response of orthotropic composite plates predicted from a one-parameter differential equation. AIAA Journal, 1992, 30, 1587-1596.	2.6	102
7	Closed form prediction of peak load and delamination onset under small mass impact. Composite Structures, 2003, 59, 341-349.	5.8	100
8	A survey of test methods for multiaxial and out-of-plane strength of composite laminates. Composites Science and Technology, 2011, 71, 773-783.	7.8	91
9	Engineering Method for Prediction of Impact Response and Damage in Sandwich Panels. Journal of Sandwich Structures and Materials, 2002, 4, 3-29.	3.5	81
10	Damage sequence in thin-ply composite laminates under out-of-plane loading. Composites Part A: Applied Science and Manufacturing, 2016, 87, 66-77.	7.6	80
11	A simplified improved beam analysis of the DCB specimen. Composites Science and Technology, 1992, 43, 329-338.	7.8	75
12	Analytical model for delamination growth during small mass impact on plates. International Journal of Solids and Structures, 2010, 47, 2884-2892.	2.7	67
13	Analytical prediction of damage due to large mass impact on thin ply composites. Composites Part A: Applied Science and Manufacturing, 2015, 72, 184-191.	7.6	62
14	Improved theory for contact indentation of sandwich panels. AIAA Journal, 1996, 34, 1238-1244.	2.6	44
15	Delamination buckling: A finite element study with realistic delamination shapes, multiple delaminations and fibre fracture cracks. Composites Part A: Applied Science and Manufacturing, 2010, 41, 684-692.	7.6	39
16	A physically based model for kink-band growth and longitudinal crushing of composites under 3D stress states accounting for friction. Composites Science and Technology, 2016, 135, 39-45.	7.8	38
17	Tensile stiffness distribution in impacted composite laminates determined by an inverse method. Composites Part A: Applied Science and Manufacturing, 2008, 39, 1282-1293.	7.6	36
18	Nonlinear compressive stiffness in impacted composite laminates determined by an inverse method. Composites Part A: Applied Science and Manufacturing, 2009, 40, 260-272.	7.6	36

#	Article	IF	Citations
19	Energy absorption and damage mechanisms in progressive crushing of corrugated NCF laminates: Fractographic analysis. Composite Structures, 2014, 110, 110-117.	5.8	36
20	Use of the Iosipescu test for the identification of shear damage evolution laws of an orthotropic composite. Composite Structures, 2017, 174, 319-328.	5.8	35
21	Higher-order dynamic response of composite sandwich panels with flexible core under simultaneous low-velocity impacts of multiple small masses. International Journal of Solids and Structures, 2006, 43, 6667-6687.	2.7	33
22	Investigations of delamination criticality and the transferability of growth criteria. Composite Structures, 1996, 36, 221-247.	5.8	26
23	Mesh objective implementation of a fibre kinking model for damage growth with friction. Composite Structures, 2017, 168, 384-391.	5.8	24
24	Experiments and analysis of laminates with artificial damage. Composites Science and Technology, 2003, 63, 199-209.	7.8	22
25	Modeling the Lofting of Runway Debris by Aircraft Tires. Journal of Aircraft, 2008, 45, 1701-1714.	2.4	19
26	Modelling of impact damage zones in composite laminates for strength after impact. Aeronautical Journal, 2012, 116, 1349-1365.	1.6	19
27	Investigation of impact damage in multi-directional tape laminates and its effect on local tensile stiffness. Composites Science and Technology, 2008, 68, 2518-2525.	7.8	18
28	Criteria for skin rupture and core shear cracking induced by impact on sandwich panels. Composite Structures, 2015, 125, 81-87.	5.8	15
29	Interaction of delaminations and matrix cracks in a CFRP plate, Part I: A test method for model validation. Composites Part A: Applied Science and Manufacturing, 2017, 103, 314-326.	7.6	15
30	Compression failure mechanism in small-scale wood specimens reinforced with CFRP: An experimental study. Construction and Building Materials, 2013, 41, 790-800.	7.2	14
31	Development of a test method for evaluating the crushing behaviour of unidirectional laminates. Journal of Composite Materials, 2017, 51, 4041-4051.	2.4	13
32	Development and validation of a finite deformation fibre kinking model for crushing of composites. Composites Science and Technology, 2020, 197, 108236.	7.8	12
33	Improvement and validation of a physically based model for the shear and transverse crushing of orthotropic composites. Journal of Composite Materials, 2019, 53, 1681-1696.	2.4	10
34	Simplified prediction of stresses in transversely isotropic composite plates under Hertzian contact load. Composite Structures, 2006, 73, 70-77.	5.8	9
35	Finite element study of compressively loaded fibres fractured during impact. Composites Science and Technology, 2009, 69, 586-593.	7.8	9
36	Simplified theory for contact indentation of sandwich panels. , 1995, , .		7

#	Article	IF	Citations
37	Parametric analysis of runway stone lofting mechanisms. International Journal of Impact Engineering, 2010, 37, 502-514.	5.0	7
38	Improved models for runway debris lofting simulations. Aeronautical Journal, 2009, 113, 669-681.	1.6	6
39	High Velocity Hail Impact on Composite Laminates â€“ Modelling and Testing. Solid Mechanics and Its Applications, 2013, , 393-426.	0.2	6
40	Runway debris impact threat maps for transport aircraft. Aeronautical Journal, 2014, 118, 229-266.	1.6	6
41	Homogenised non-linear soft inclusion for simulation of impact damage in composite structures. Composite Structures, 2011, 93, 952-960.	5.8	5
42	Response of a helmet liner under biaxial loading. Polymer Testing, 2018, 72, 110-114.	4.8	5
43	A micromechanically based model for strain rate effects in unidirectional composites. Mechanics of Materials, 2020, 148, 103491.	3.2	5
44	Theory for Small Mass Impact on Sandwich Panels. , 1998, , 231-238.		4
45	Experimental Characterisation of Tyre Indentation by Simulated Runway Debris. Strain, 2011, 47, 343-350.	2.4	3
46	Use of enriched shell elements compared to solid elements for modelling delamination growth during impact on composites. Composite Structures, 2021, 269, 113945.	5.8	3
47	A micromechanically based model for dynamic damage evolution in unidirectional composites. International Journal of Solids and Structures, 2022, 238, 111368.	2.7	3
48	Analytical Modeling of Runway Stone Lofting. Journal of Aircraft, 2011, 48, 1412-1421.	2.4	2
49	Improved Aircraft Tire and Stone Models for Runway Debris Lofting Simulations. , 2009, , .		0
50	Methodology for Predicting the Threat of Runway Debris Impact to Large Transport Aircraft. , 2012, , .		0