

Leif Asp

List of Publications by Year in descending order

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86
papers

3,442
citations

136950

32
h-index

144013

57
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86
all docs

86
docs citations

86
times ranked

1822
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural power composites. <i>Composites Science and Technology</i> , 2014, 101, 41-61.	7.8	241
2	Prediction of matrix-initiated transverse failure in polymer composites. <i>Composites Science and Technology</i> , 1996, 56, 1089-1097.	7.8	175
3	A criterion for crack initiation in glassy polymers subjected to a composite-like stress state. <i>Composites Science and Technology</i> , 1996, 56, 1291-1301.	7.8	152
4	Structural battery composites: a review. <i>Functional Composites and Structures</i> , 2019, 1, 042001.	3.4	133
5	Delamination Growth and Thresholds in a Carbon/Epoxy Composite Under Fatigue Loading. <i>Journal of Composites Technology and Research</i> , 2001, 23, 55.	0.4	133
6	The effects of moisture and temperature on the interlaminar delamination toughness of a carbon/epoxy composite. <i>Composites Science and Technology</i> , 1998, 58, 967-977.	7.8	126
7	Mixed-mode delamination growth in carbon fibre composite laminates under cyclic loading. <i>International Journal of Solids and Structures</i> , 2004, 41, 4219-4235.	2.7	126
8	Structural capacitor materials made from carbon fibre epoxy composites. <i>Composites Science and Technology</i> , 2010, 70, 1135-1140.	7.8	107
9	Effects of a composite-like stress state on the fracture of epoxies. <i>Composites Science and Technology</i> , 1995, 53, 27-37.	7.8	104
10	Delamination buckling and growth for delaminations at different depths in a slender composite panel. <i>International Journal of Solids and Structures</i> , 2001, 38, 3039-3071.	2.7	103
11	Formation of damage and its effects on non-crimp fabric reinforced composites loaded in tension. <i>Composites Science and Technology</i> , 2004, 64, 675-692.	7.8	103
12	Multifunctional performance of a carbon fiber UD lamina electrode for structural batteries. <i>Composites Science and Technology</i> , 2018, 168, 81-87.	7.8	96
13	Performance analysis framework for structural battery composites in electric vehicles. <i>Composites Part B: Engineering</i> , 2020, 186, 107822.	12.0	82
14	A Structural Battery and its Multifunctional Performance. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2000093.	5.8	74
15	Effects of fiber and interphase on matrix-initiated transverse failure in polymer composites. <i>Composites Science and Technology</i> , 1996, 56, 657-665.	7.8	72
16	An experimental study of fibre waviness and its effects on compressive properties of unidirectional NCF composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 107, 665-674.	7.6	72
17	Structural batteries made from fibre reinforced composites. <i>Plastics, Rubber and Composites</i> , 2010, 39, 148-150.	2.0	71
18	Mechanical, electrical and microstructural characterisation of multifunctional structural power composites. <i>Journal of Composite Materials</i> , 2015, 49, 1823-1834.	2.4	69

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19	Solid polymer electrolyte-coated carbon fibres for structural and novel micro batteries. <i>Composites Science and Technology</i> , 2013, 89, 149-157.	7.8	68
20	Effects of temperature on delamination growth in a carbon/epoxy composite under fatigue loading. <i>International Journal of Fatigue</i> , 2002, 24, 179-184.	5.7	67
21	Graphitic microstructure and performance of carbon fibre Li-ion structural battery electrodes. <i>Multifunctional Materials</i> , 2018, 1, 015003.	3.7	65
22	Electrophoretic coating of LiFePO ₄ /Graphene oxide on carbon fibers as cathode electrodes for structural lithium ion batteries. <i>Composites Science and Technology</i> , 2021, 208, 108768.	7.8	61
23	Multifunctional composite materials for energy storage in structural load paths. <i>Plastics, Rubber and Composites</i> , 2013, 42, 144-149.	2.0	55
24	Compressive Failure of Impacted NCF Composite Sandwich Panels - Characterisation of the Failure Process. <i>Journal of Composite Materials</i> , 2004, 38, 495-514.	2.4	54
25	Effects of state of charge on elastic properties of 3D structural battery composites. <i>Composites Science and Technology</i> , 2019, 169, 26-33.	7.8	48
26	Failure of NCF composites subjected to combined compression and shear loading. <i>Composites Science and Technology</i> , 2006, 66, 2865-2877.	7.8	46
27	Structural carbon fibre composite/PET capacitors – Effects of dielectric separator thickness. <i>Composites Part B: Engineering</i> , 2013, 49, 16-21.	12.0	45
28	Thermal and diffusion induced stresses in a structural battery under galvanostatic cycling. <i>Composites Science and Technology</i> , 2019, 179, 69-78.	7.8	45
29	Assessment of Evaluation Methods for the Mixed-Mode Bending Test. <i>Journal of Composites Technology and Research</i> , 1999, 21, 37.	0.4	44
30	Damage tolerance analysis of NCF composite sandwich panels. <i>Composites Science and Technology</i> , 2008, 68, 2635-2645.	7.8	35
31	Determination of transverse and shear moduli of single carbon fibres. <i>Carbon</i> , 2020, 158, 772-782.	10.3	34
32	Multifunctional approaches for safe structural batteries. <i>Journal of Energy Storage</i> , 2021, 40, 102747.	8.1	33
33	Evaluation of Four Composite Shear Test Methods by Digital Speckle Strain Mapping and Fractographic Analysis. <i>Journal of Composites Technology and Research</i> , 2000, 22, 161.	0.4	33
34	A high resolution method for characterisation of fibre misalignment angles in composites. <i>Composites Science and Technology</i> , 2018, 165, 214-221.	7.8	32
35	Performance of bicontinuous structural electrolytes. <i>Multifunctional Materials</i> , 2020, 3, 025001.	3.7	32
36	A Structural Battery and its Multifunctional Performance. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2170008.	5.8	32

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37	Transverse strength of unidirectional non-crimp fabric composites: Multiscale modelling. Composites Part B: Engineering, 2014, 65, 47-56.	12.0	28
38	An experimental investigation of the influence of delamination growth on the residual strength of impacted laminates. Composites Part A: Applied Science and Manufacturing, 2001, 32, 1229-1235.	7.6	27
39	Automated X-ray computer tomography segmentation method for finite element analysis of non-crimp fabric reinforced composites. Composite Structures, 2021, 256, 113136.	5.8	26
40	Characterization of the adhesive properties between structural battery electrolytes and carbon fibers. Composites Science and Technology, 2020, 188, 107962.	7.8	25
41	CFRP structural capacitor materials for automotive applications. Plastics, Rubber and Composites, 2011, 40, 311-316.	2.0	24
42	High velocity impact on NCF reinforced composites. Composites Science and Technology, 2009, 69, 1478-1482.	7.8	23
43	Compressive strength assessment of fibre composites based on a defect severity model. Composites Science and Technology, 2019, 181, 107685.	7.8	23
44	A multicell structural battery composite laminate. EcoMat, 2022, 4, .	11.9	23
45	Influence of in-plane shear on kink-plane orientation in a unidirectional fibre composite. Composites Part A: Applied Science and Manufacturing, 2019, 119, 283-290.	7.6	22
46	Approximate analytical constitutive model for non-crimp fabric composites. Composites Part A: Applied Science and Manufacturing, 2005, 36, 173-181.	7.6	22
47	On transition of delamination growth behaviour for compression loaded composite panels. International Journal of Solids and Structures, 2001, 38, 8407-8440.	2.7	21
48	Reuse of polymer materials and carbon fibres in novel engineering composite materials. Plastics, Rubber and Composites, 2009, 38, 419-425.	2.0	20
49	Effect of lithiation on the elastic moduli of carbon fibres. Carbon, 2021, 185, 234-241.	10.3	20
50	Electro-chemo-mechanically coupled computational modelling of structural batteries. Multifunctional Materials, 2020, 3, 045002.	3.7	20
51	Orthotropic criteria for transverse failure of non-crimp fabric-reinforced composites. Journal of Composite Materials, 2016, 50, 2445-2458.	2.4	16
52	Ultra-strong and stiff randomly-oriented discontinuous composites: Closing the gap to quasi-isotropic continuous-fibre laminates. Composites Part A: Applied Science and Manufacturing, 2020, 132, 105826.	7.6	15
53	Electrocoating of carbon fibres at ambient conditions. Composites Part B: Engineering, 2016, 91, 94-102.	12.0	14
54	Experimental and computational characterization of carbon fibre based structural battery electrode laminae. Composites Science and Technology, 2022, 220, 109283.	7.8	14

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55	Effects of CFRP laminate thickness on bending after impact strength. <i>Plastics, Rubber and Composites</i> , 2009, 38, 61-66.	2.0	12
56	Mechanical performance and modelling of a fully recycled modified CF/PP composite. <i>Journal of Composite Materials</i> , 2012, 46, 1503-1517.	2.4	12
57	Experimental characterization of multifunctional polymer electrolyte coated carbon fibres. <i>Functional Composites and Structures</i> , 2019, 1, 025001.	3.4	12
58	A screen-printing method for manufacturing of current collectors for structural batteries. <i>Multifunctional Materials</i> , 2021, 4, 035002.	3.7	12
59	Computational modelling of structural batteries accounting for stress-assisted convection in the electrolyte. <i>International Journal of Solids and Structures</i> , 2022, 238, 111343.	2.7	12
60	On the coupled thermo-electro-chemo-mechanical performance of structural batteries with emphasis on thermal effects. <i>European Journal of Mechanics, A/Solids</i> , 2022, 94, 104586.	3.7	12
61	Compressive strength assessment of a CFRP aero-engine component – An approach based on measured fibre misalignment angles. <i>Composite Structures</i> , 2020, 233, 111632.	5.8	11
62	Mapping nitrogen heteroatoms in carbon fibres using atom probe tomography and photoelectron spectroscopy. <i>Carbon</i> , 2021, 179, 20-27.	10.3	10
63	Implementation of failure criteria for transverse failure of orthotropic Non-Crimp Fabric composite materials. <i>Composites Part A: Applied Science and Manufacturing</i> , 2017, 92, 158-166.	7.6	8
64	Mechanism based failure of 3D-printed continuous carbon fiber reinforced thermoplastic composites. <i>Composites Science and Technology</i> , 2021, 213, 108962.	7.8	8
65	Robust numerical analysis of fibrous composites from X-ray computed tomography image data enabling low resolutions. <i>Composites Science and Technology</i> , 2022, 224, 109458.	7.8	8
66	Compression failure mechanism in small scale timber specimens. <i>Construction and Building Materials</i> , 2014, 50, 130-139.	7.2	7
67	An Experimental Study into the Effect of Damage on the Capacitance of Structural Composite Capacitors. <i>Journal of Multifunctional Composites</i> , 2013, 1, 1-7.	0.2	7
68	X-ray computed tomography data structure tensor orientation mapping for finite element models – STXAE. <i>Software Impacts</i> , 2022, 11, 100216.	1.4	7
69	High Velocity Hail Impact on Composite Laminates – Modelling and Testing. <i>Solid Mechanics and Its Applications</i> , 2013, , 393-426.	0.2	6
70	Recycled polypropylene aimed as composites precursor material. <i>Plastics, Rubber and Composites</i> , 2009, 38, 412-418.	2.0	5
71	Viscoelastic and viscoplastic behavior of a fully recycled carbon fiber-reinforced maleic anhydride grafted polypropylene modified polypropylene composite. <i>Journal of Composite Materials</i> , 2012, 46, 1633-1646.	2.4	5
72	Multifunctional structural battery and supercapacitor composites. , 2015, , 619-661.		5

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73	X-ray tomography data of compression tested unidirectional fibre composites with different off-axis angles. Data in Brief, 2019, 25, 104263.	1.0	4
74	Hot spot analysis in complex composite material structures. Composite Structures, 2019, 207, 776-786.	5.8	4
75	Characterisation of tape-based carbon fibre thermoplastic discontinuous composites for energy absorption. Plastics, Rubber and Composites, 2021, 50, 351-361.	2.0	4
76	Two phase continuum modelling of composites consolidation. Plastics, Rubber and Composites, 2009, 38, 93-97.	2.0	3
77	Anisotropic and tensionâ€“compression asymmetric model for composites consolidation. Composites Part A: Applied Science and Manufacturing, 2010, 41, 284-294.	7.6	3
78	Microdamage in Composite Laminates: Experiments and Observation. Applied Mechanics and Materials, 0, 518, 84-89.	0.2	3
79	Fractographic study to characterise the interaction between intralaminar and interlaminar fracture from embedded defects under compression loading. Composites Part A: Applied Science and Manufacturing, 2019, 125, 105557.	7.6	3
80	Delamination Criticality in Slender Compression-Loaded Composite Panels. Key Engineering Materials, 2001, 221-222, 3-16.	0.4	2
81	Modelling stiffness and strength of non-crimp fabric composites: semi-laminar analysis. , 2011, , 402-438.		2
82	Dataset of non-crimp fabric reinforced composites for an X-ray computer tomography aided engineering process. Data in Brief, 2020, 33, 106518.	1.0	2
83	Identification of Representative Equivalent Volumes on the Microstructure of 3D-Printed Fiber-Reinforced Thermoplastics Based on Statistical Characterization. Polymers, 2022, 14, 972.	4.5	2
84	Stiffness and strength modelling of non-crimp fabric composites. , 2011, , .		0
85	Composite Design for a Foiling Optimist Dinghy. Proceedings (mdpi), 2018, 2, .	0.2	0
86	Industrial Framework for Identification and Verification of Hot Spots in Automotive Composite Structures. SAE International Journal of Materials and Manufacturing, 2019, 12, .	0.3	0