

Larry B Lessard

List of Publications by Year in descending order

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99
papers

4,614
citations

109321

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106344

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99
docs citations

99
times ranked

2767
citing authors

#	ARTICLE	IF	CITATIONS
1	Damage Tolerance of Laminated Composites Containing an Open Hole and Subjected to Compressive Loadings: Part I—Analysis. <i>Journal of Composite Materials</i> , 1991, 25, 2-43.	2.4	331
2	Optimum stacking sequence design of composite materials Part II: Variable stiffness design. <i>Composite Structures</i> , 2010, 93, 1-13.	5.8	320
3	Progressive Fatigue Damage Modeling of Composite Materials, Part I: Modeling. <i>Journal of Composite Materials</i> , 2000, 34, 1056-1080.	2.4	283
4	Optimum stacking sequence design of composite materials Part I: Constant stiffness design. <i>Composite Structures</i> , 2009, 90, 1-11.	5.8	272
5	Experimental study of the effect of automated fiber placement induced defects on performance of composite laminates. <i>Composites Part A: Applied Science and Manufacturing</i> , 2011, 42, 484-491.	7.6	224
6	Progressive Fatigue Damage Modeling of Composite Materials, Part II: Material Characterization and Model Verification. <i>Journal of Composite Materials</i> , 2000, 34, 1081-1116.	2.4	161
7	Two-Dimensional Modeling of Composite Pinned-Joint Failure. <i>Journal of Composite Materials</i> , 1995, 29, 671-697.	2.4	121
8	Damage behavior of fiber reinforced composite plates subjected to drop weight impacts. <i>Composites Science and Technology</i> , 2006, 66, 61-68.	7.8	119
9	Optimization of variable stiffness composites with embedded defects induced by Automated Fiber Placement. <i>Composite Structures</i> , 2014, 107, 160-166.	5.8	116
10	Defect layer method to capture effect of gaps and overlaps in variable stiffness laminates made by Automated Fiber Placement. <i>Composite Structures</i> , 2013, 97, 245-251.	5.8	112
11	Surrogate-based multi-objective optimization of a composite laminate with curvilinear fibers. <i>Composite Structures</i> , 2012, 94, 2306-2313.	5.8	101
12	Parametric study of automotive composite bumper beams subjected to low-velocity impacts. <i>Composite Structures</i> , 2005, 68, 419-427.	5.8	91
13	Cure shrinkage characterization and modeling of a polyester resin containing low profile additives. <i>Composites Part A: Applied Science and Manufacturing</i> , 2007, 38, 994-1009.	7.6	91
14	Recycling of fiberglass wind turbine blades into reinforced filaments for use in Additive Manufacturing. <i>Composites Part B: Engineering</i> , 2019, 175, 107101.	12.0	84
15	A comparative study of metamodeling methods for the design optimization of variable stiffness composites. <i>Composite Structures</i> , 2014, 107, 494-501.	5.8	77
16	Characterization of mechanical properties of randomly oriented strand thermoplastic composites. <i>Journal of Composite Materials</i> , 2016, 50, 2833-2851.	2.4	75
17	Damage Tolerance of Laminated Composites Containing an Open Hole and Subjected to Compressive Loadings: Part II—Experiment. <i>Journal of Composite Materials</i> , 1991, 25, 44-64.	2.4	74
18	Investigation of bolted/bonded composite joint behaviour using design of experiments. <i>Composite Structures</i> , 2017, 170, 192-201.	5.8	69

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19	Shear buckling of a composite drive shaft under torsion. <i>Composite Structures</i> , 2004, 64, 63-69.	5.8	67
20	Hybrid bonded-fastened joints and their application in composite structures: A general review. <i>Journal of Reinforced Plastics and Composites</i> , 2016, 35, 764-781.	3.1	67
21	Improving load sharing in hybrid bonded/bolted composite joints using an interference-fit bolt. <i>Composite Structures</i> , 2016, 149, 329-338.	5.8	66
22	Micro-CT measurement of fibre misalignment: Application to carbon/epoxy laminates manufactured in autoclave and by vacuum assisted resin transfer moulding. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 104, 14-23.	7.6	60
23	Fatigue and damage-tolerance analysis of composite laminates: Stiffness loss, damage-modelling, and life prediction. <i>Composites Science and Technology</i> , 1994, 51, 43-51.	7.8	58
24	Mechanical characterisation and modelling of randomly oriented strand architecture and their hybrids – A general review. <i>Journal of Reinforced Plastics and Composites</i> , 2018, 37, 548-580.	3.1	57
25	Load sharing in single-lap bonded/bolted composite joints. Part I: Model development and validation. <i>Composite Structures</i> , 2015, 129, 268-275.	5.8	53
26	Tension-tension fatigue behaviour of woven flax/epoxy composites. <i>Journal of Reinforced Plastics and Composites</i> , 2015, 34, 857-867.	3.1	51
27	A non-dominated sorting hybrid algorithm for multi-objective optimization of engineering problems. <i>Engineering Optimization</i> , 2011, 43, 39-59.	2.6	50
28	Load sharing in single-lap bonded/bolted composite joints. Part II: Global sensitivity analysis. <i>Composite Structures</i> , 2015, 129, 276-283.	5.8	50
29	Analytical model for prediction of strength and fracture paths characteristic to randomly oriented strand (ROS) composites. <i>Composites Part B: Engineering</i> , 2016, 96, 103-111.	12.0	50
30	Application of natural fiber composites to musical instrument top plates. <i>Journal of Composite Materials</i> , 2012, 46, 145-154.	2.4	49
31	Three-dimensional stress analysis of free-edge effects in a simple composite cross-ply laminate. <i>International Journal of Solids and Structures</i> , 1996, 33, 2243-2259.	2.7	48
32	Recycled Glass Fiber Composites from Wind Turbine Waste for 3D Printing Feedstock: Effects of Fiber Content and Interface on Mechanical Performance. <i>Materials</i> , 2019, 12, 3929.	2.9	44
33	Progressive Fatigue Damage Modeling of Cross-ply Laminates, II: Experimental Evaluation. <i>Journal of Composite Materials</i> , 2010, 44, 1261-1277.	2.4	40
34	Effects of Material Nonlinearity on the Three-Dimensional Stress State of Pin-Loaded Composite Laminates. <i>Journal of Composite Materials</i> , 1996, 30, 839-861.	2.4	39
35	Residual stiffness in cross-ply laminates subjected to cyclic loading. <i>Composite Structures</i> , 2008, 85, 205-212.	5.8	39
36	On the elastostatic analysis of mechanical systems. <i>Mechanism and Machine Theory</i> , 2012, 58, 202-216.	4.5	39

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37	Modelling of mechanical properties of randomly oriented strand thermoplastic composites. <i>Journal of Composite Materials</i> , 2017, 51, 831-845.	2.4	38
38	Tensile properties and interfacial shear strength of recycled fibers from wind turbine waste. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 131, 105786.	7.6	37
39	Characterization of flax/epoxy prepregs before and after cure. <i>Journal of Reinforced Plastics and Composites</i> , 2013, 32, 777-785.	3.1	35
40	An experimental investigation of class A surface finish of composites made by the resin transfer molding process. <i>Composites Science and Technology</i> , 2007, 67, 3176-3186.	7.8	34
41	Optimization of RTM processing parameters for Class A surface finish. <i>Composites Part B: Engineering</i> , 2008, 39, 1280-1286.	12.0	33
42	Structural health monitoring of a composite skin-stringer assembly using within-the-bond strategy of guided wave propagation. <i>Materials and Design</i> , 2016, 90, 787-794.	7.0	33
43	Constrained Globalized Nelder-Mead Method for Simultaneous Structural and Manufacturing Optimization of a Composite Bracket. <i>Journal of Composite Materials</i> , 2008, 42, 717-736.	2.4	32
44	Nonlinear static analysis of a composite bonded/bolted single-lap joint using the meshfree radial point interpolation method. <i>Composite Structures</i> , 2015, 134, 1024-1035.	5.8	32
45	An Experimental Study of Saturated and Unsaturated Permeabilities in Resin Transfer Molding Based on Unidirectional Flow Measurements. <i>Journal of Reinforced Plastics and Composites</i> , 2004, 23, 1515-1536.	3.1	31
46	A parametric study on static behavior and load sharing of multi-bolt hybrid bonded/bolted composite joints. <i>Composites Part B: Engineering</i> , 2021, 217, 108897.	12.0	31
47	Statistical model for multiaxial fatigue behavior of unidirectional plies. <i>Composites Science and Technology</i> , 1999, 59, 2025-2035.	7.8	30
48	Utilization of FEA in the design of composite bicycle frames. <i>Composites</i> , 1995, 26, 72-74.	0.7	29
49	Effect of Load Distribution on the Fiber Buckling Strength of Unidirectional Composites. <i>Journal of Composite Materials</i> , 1991, 25, 65-87.	2.4	28
50	Guided wave scattering behavior in composite bonded assemblies. <i>Composite Structures</i> , 2016, 136, 696-705.	5.8	28
51	Injectable, Pore-Forming, Perfusable Double-Network Hydrogels Resilient to Extreme Biomechanical Stimulations. <i>Advanced Science</i> , 2022, 9, e2102627.	11.2	28
52	Evolution of mechanical properties of flexible epoxy adhesives under cyclic loading and its effects on composite hybrid bolted/bonded joint design. <i>Composite Structures</i> , 2018, 189, 54-60.	5.8	25
53	Mechanical characterization of a flexible epoxy adhesive for the design of hybrid bonded-bolted joints. <i>Polymer Testing</i> , 2019, 79, 106048.	4.8	23
54	Effect of adhesive layer compliance on strength of single-lap hybrid bonded-bolted joints. <i>Composite Structures</i> , 2021, 261, 113324.	5.8	23

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55	3D-Printed Wood-Fiber Reinforced Architected Cellular Composites. <i>Advanced Engineering Materials</i> , 2020, 22, 2000565.	3.5	22
56	Optimum Structural and Manufacturing Design of a Braided Hollow Composite Part. <i>Applied Composite Materials</i> , 2010, 17, 159-173.	2.5	21
57	Testing of In-Plane Shear Properties under Fatigue Loading. <i>Journal of Reinforced Plastics and Composites</i> , 1995, 14, 965-987.	3.1	20
58	Title is missing!. <i>Applied Composite Materials</i> , 1998, 5, 289-304.	2.5	20
59	An experimental study on the mechanical behaviour of bonded and hybrid bonded-bolted composite joints using digital image correlation (DIC) technique. <i>Composite Structures</i> , 2021, 276, 114544.	5.8	19
60	Pareto frontier for simultaneous structural and manufacturing optimization of a composite part. <i>Structural and Multidisciplinary Optimization</i> , 2010, 40, 497-511.	3.5	18
61	Mechanical and thermal study of 3D printing composite filaments from wind turbine waste. <i>Polymer Composites</i> , 2021, 42, 2305-2316.	4.6	18
62	A closed-form solution for stresses at curved free edges in composite laminates: A variational approach. <i>Composites Science and Technology</i> , 1997, 57, 1341-1354.	7.8	15
63	A fully non-linear 3-D constitutive relationship for the stress analysis of a pin-loaded composite laminate. <i>Composites Science and Technology</i> , 2002, 62, 429-439.	7.8	15
64	Application of composite materials to the chenda, an Indian percussion instrument. <i>Applied Acoustics</i> , 2015, 88, 1-5.	3.3	15
65	Multiscale finite element analysis of mode I delamination growth in a fabric composite. <i>Composite Structures</i> , 2015, 133, 157-165.	5.8	14
66	Interlaminar shear behaviour of hybrid fibre architectures of randomly oriented strands combined with laminate groups. <i>Composite Structures</i> , 2017, 176, 823-832.	5.8	14
67	Banana fiber/low-density polyethylene recycled composites for third world eco-friendly construction applications – Waste for life project Sri Lanka. <i>Journal of Reinforced Plastics and Composites</i> , 2018, 37, 1322-1331.	3.1	14
68	Numerical simulations for class A surface finish in resin transfer moulding process. <i>Composites Part B: Engineering</i> , 2012, 43, 819-824.	12.0	13
69	Title is missing!. <i>Applied Composite Materials</i> , 1998, 5, 49-64.	2.5	12
70	An Overview of Fibre-Reinforced Composites for Musical Instrument Soundboards. <i>Acoustics Australia</i> , 2015, 43, 117-122.	2.4	12
71	Recycling and valorization of glass fibre thermoset composite waste by cold incorporation into a sustainable inorganic polymer matrix. <i>Composites Part B: Engineering</i> , 2021, 223, 109120.	12.0	12
72	Progressive Fatigue Damage Modeling of Composite Materials, Part I: Modeling. <i>Journal of Composite Materials</i> , 2000, 34, 1056-1080.	2.4	12

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73	Durability assessment of hybrid FRP composite shell and its application to prestressed concrete girders. <i>Construction and Building Materials</i> , 2017, 150, 114-122.	7.2	10
74	Experimental and analytical investigation of 3D printed specimens reinforced by different forms of recyclates from wind turbine waste. <i>Polymer Composites</i> , 2021, 42, 4533-4548.	4.6	10
75	Experimental investigation of the effect of half gap/half overlap defects on the strength of composite structures fabricated using automated fibre placement (AFP). <i>Composites Part A: Applied Science and Manufacturing</i> , 2021, 150, 106610.	7.6	10
76	Optimum structural design of a two-limb Schönlies motion generator. <i>Mechanism and Machine Theory</i> , 2014, 80, 125-141.	4.5	8
77	A new finite element method for modeling delamination propagation without additional degrees of freedom. <i>Composite Structures</i> , 2016, 147, 82-98.	5.8	8
78	Finite element modeling of Lamb wave propagation in composite stepped joints. <i>Journal of Reinforced Plastics and Composites</i> , 2016, 35, 796-806.	3.1	8
79	Multi-objective optimization of a composite rotor blade cross-section. <i>Composite Structures</i> , 2013, 96, 75-81.	5.8	7
80	Architected cellular fiber-reinforced composite. <i>Composites Part B: Engineering</i> , 2022, 238, 109894.	12.0	7
81	Constraint-wrench analysis of robotic manipulators. <i>Multibody System Dynamics</i> , 2013, 29, 139-168.	2.7	6
82	An overview of additive manufacturing technologies for musical wind instruments. <i>SN Applied Sciences</i> , 2021, 3, 1.	2.9	6
83	Polylactic acid/recycled wind turbine glass fiber composites with enhanced mechanical properties and toughness. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	2.6	6
84	Effect of Common Chemical Treatments on the Process Kinetics and Mechanical Properties of Flax/Epoxy Composites Manufactured by Resin Infusion. <i>Journal of Polymers and the Environment</i> , 2015, 23, 143-155.	5.0	5
85	Elastodynamics of a two-limb Schönlies motion generator. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2015, 229, 751-764.	2.1	5
86	Tensile behaviour of hybrid fibre architectures of randomly oriented strands combined with laminate groups. <i>Journal of Composite Materials</i> , 2019, 53, 3725-3740.	2.4	5
87	Bi-directional fluid-structure interaction for prediction of tip clearance influence on a composite ducted propeller. <i>Ocean Engineering</i> , 2020, 208, 107390.	4.3	5
88	Layer Separation for Optimization of Composite Laminates. , 2008, , .		5
89	Size-dependent behavior of laminates with curvilinear fibers made by automated fiber placement. <i>Science and Engineering of Composite Materials</i> , 2015, 22, 157-163.	1.4	4
90	Experimental Model of Impact Damage for Guided Wave-Based Inspection of Composites. <i>Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems</i> , 2018, 1, 040801-040801-8.	0.9	4

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91	3D-Printed Wood-Fiber Reinforced Architected Cellular Composites. <i>Advanced Engineering Materials</i> , 2020, 22, .	3.5	4
92	Progressive Fatigue Damage Modeling of Composite Materials, Part II: Material Characterization and Model Verification. <i>Journal of Composite Materials</i> , 2000, 34, 1081-1116.	2.4	3
93	Selection of Structural Features for the Systematic Study of Guided Wave Propagation and Interaction with Damage. , 0, , .		2
94	Flow-control and hybridization strategies for thermoplastic stiffened panels of long discontinuous fibers. <i>Journal of Reinforced Plastics and Composites</i> , 2017, 36, 1327-1342.	3.1	1
95	Characterization of Guided Waves Propagation in a Composite Skin-stringer Assembly. , 0, , .		1
96	Design of a Carbon Fiber Bicycle Stem using a Novel Internal Bladder Resin Transfer Molding Technique. <i>Advanced Composites Letters</i> , 2010, 19, 096369351001900.	1.3	0
97	A Study of the Effect of Geometry Changes on the Structural Stiffness of a Composite D-Spar. , 2010, , .		0
98	Bond Characteristics between Fiber-Reinforced Polymer Composite Laminate and Prestressed Concrete. <i>IABSE Symposium Report</i> , 2013, , .	0.0	0
99	A novel flax fibre composite material for stringed instrument fingerboards. <i>Journal of Reinforced Plastics and Composites</i> , 2022, 41, 670-678.	3.1	0