

# conor McCarthy

## List of Publications by Year in descending order

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Version: 2024-02-01

75  
papers

3,813  
citations

109321

35  
h-index

128289

60  
g-index

76  
all docs

76  
docs citations

76  
times ranked

2097  
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of layup, stacking sequence and loading rate on energy absorption of tension-absorber joints. <i>Composite Structures</i> , 2021, 261, 113327.	5.8	6
2	Service Robots in the Healthcare Sector. <i>Robotics</i> , 2021, 10, 47.	3.5	103
3	An evaluation of the influence of manufacturing methods on interlocked aluminium-thermoplastic composite joint performance. <i>Composites Part A: Applied Science and Manufacturing</i> , 2021, 143, 106281.	7.6	15
4	Blockchain-Empowered Digital Twins Collaboration: Smart Transportation Use Case. <i>Machines</i> , 2021, 9, 193.	2.2	65
5	Quasi-static and dynamic performance of novel interlocked hybrid metal-composite joints. <i>Composite Structures</i> , 2020, 253, 112769.	5.8	18
6	Optimisation of Ultrasonically Welded Joints through Machine Learning. <i>Procedia CIRP</i> , 2020, 93, 527-531.	1.9	12
7	Carbon nanotube embedded adhesives for real-time monitoring of adhesion failure in high performance adhesively bonded joints. <i>Scientific Reports</i> , 2020, 10, 16833.	3.3	21
8	Precursor-Mediated Linear- and Branched-Polytypism Control in $\text{Cu}_2\text{ZnSnS}_4$ Colloidal Nanocrystals Using a Dual-Injection Method. <i>Chemistry of Materials</i> , 2020, 32, 7254-7262.	6.7	7
9	Using finite element analysis to develop a digital twin of a manufacturing bending operation. <i>Procedia CIRP</i> , 2020, 93, 568-574.	1.9	17
10	Mesoscale modelling of extended bearing failure in tension-absorber joints. <i>International Journal of Mechanical Sciences</i> , 2020, 182, 105777.	6.7	7
11	Effects of transient dynamic loading on the energy absorption capability of composite bolted joints undergoing extended bearing failure. <i>Composite Structures</i> , 2020, 247, 112476.	5.8	8
12	Novel finite element for near real-time design decisions in multi-fastener composite bolted joints under various loading rates. <i>Composite Structures</i> , 2020, 240, 112005.	5.8	16
13	Energy absorption capability of composite bolted joints undergoing extended bearing failure. <i>Composite Structures</i> , 2020, 237, 111868.	5.8	11
14	Mechanical performance and failure behaviour of miniature aluminium joints with novel interlocking reinforcement. <i>International Journal of Adhesion and Adhesives</i> , 2019, 95, 102431.	2.9	4
15	Using open-source microcontrollers to enable digital twin communication for smart manufacturing. <i>Procedia Manufacturing</i> , 2019, 38, 1213-1219.	1.9	23
16	Synthesis and Characterization of $\text{CuZnSe}_2$ Nanocrystals in Wurtzite, Zinc Blende, and Core-Shell Polytypes. <i>Chemistry of Materials</i> , 2019, 31, 10085-10093.	6.7	10
17	Synthesis of $\text{Fe}_3\text{O}_4$ hollow nanospheres-carbon nanotubes nanocomposites for the enhancement of dielectric heating performance. <i>Materials Letters</i> , 2019, 235, 31-34.	2.6	12
18	Bearing damage characteristics of fibre-reinforced countersunk composite bolted joints subjected to quasi-static shear loading. <i>Composite Structures</i> , 2017, 166, 184-192.	5.8	39

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19	A virtual experimental approach to microscale composites testing. <i>Composite Structures</i> , 2017, 171, 1-9.	5.8	29
20	Temperature controlled shape evolution of iron oxide nanostructures in HMTA media. <i>RSC Advances</i> , 2017, 7, 26328-26334.	3.6	8
21	A review of key developments and pertinent issues in nanoindentation testing of fibre reinforced plastic microstructures. <i>Composite Structures</i> , 2017, 180, 782-798.	5.8	61
22	Numerical design and multi-objective optimisation of novel adhesively bonded joints employing interlocking surface morphology. <i>International Journal of Adhesion and Adhesives</i> , 2017, 78, 111-120.	2.9	16
23	An experimental investigation into multi-scale damage progression in laminated composites in bending. <i>Composite Structures</i> , 2016, 149, 33-40.	5.8	41
24	The effects of pile-up, viscoelasticity and hydrostatic stress on polymer matrix nanoindentation. <i>Polymer Testing</i> , 2016, 52, 157-166.	4.8	69
25	Assessment of residual strength of repaired solid laminate composite materials through mechanical testing. <i>Composite Structures</i> , 2016, 147, 122-130.	5.8	33
26	Formation of reworkable nanocomposite adhesives by dielectric heating of epoxy resin embedded Fe <sub>3</sub> O <sub>4</sub> hollow spheres. <i>CrystEngComm</i> , 2016, 18, 6096-6101.	2.6	8
27	Development of a novel cyanoacrylate injection repair procedure for composites. <i>Composite Structures</i> , 2016, 153, 1-11.	5.8	16
28	The effect of microscale residual stress from thermal cooldown on the nanoindentation properties of fibre-reinforced composites. <i>Journal of Composite Materials</i> , 2016, 50, 4147-4158.	2.4	9
29	A three dimensional implicit finite element damage model and its application to single-lap multi-bolt composite joints with variable clearance. <i>Composite Structures</i> , 2015, 131, 1060-1072.	5.8	52
30	Finite element analysis of catastrophic failure of dynamically-loaded countersunk composite fuselage joints. <i>Composite Structures</i> , 2015, 133, 1198-1208.	5.8	16
31	Numerical analysis of low-velocity rigid-body impact response of composite panels. <i>International Journal of Crashworthiness</i> , 2015, 20, 27-43.	1.9	30
32	Fibrous composite matrix characterisation using nanoindentation: The effect of fibre constraint and the evolution from bulk to in-situ matrix properties. <i>Composites Part A: Applied Science and Manufacturing</i> , 2015, 68, 296-303.	7.6	51
33	Numerical micromechanical investigation of interfacial strength parameters in a carbon fibre composite material. <i>Journal of Composite Materials</i> , 2014, 48, 749-760.	2.4	19
34	Numerical method to control high levels of damage growth using an implicit finite element solver applied to notched cross-ply laminates. <i>Composite Structures</i> , 2014, 110, 51-61.	5.8	6
35	Effect of thickness and laminate taper on the stiffness, strength and secondary bending of single-lap, single-bolt countersunk composite joints. <i>Composite Structures</i> , 2014, 107, 315-324.	5.8	41
36	An experimental/numerical investigation into the main driving force for crack propagation in uni-directional fibre-reinforced composite laminae. <i>Composite Structures</i> , 2014, 107, 119-130.	5.8	81

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37	Modelling bearing failure in countersunk composite joints under quasi-static loading using 3D explicit finite element analysis. <i>Composite Structures</i> , 2014, 108, 963-977.	5.8	72
38	In-situ SEM study of transverse cracking and delamination in laminated composite materials. <i>Composites Science and Technology</i> , 2014, 105, 118-126.	7.8	58
39	In-situ SEM mechanical testing of miniature bonded joints. <i>International Journal of Adhesion and Adhesives</i> , 2014, 50, 57-64.	2.9	6
40	Effects of laminate thickness, tapering and missing fasteners on the mechanical behaviour of single-lap, multi-bolt, countersunk composite joints. <i>Composite Structures</i> , 2014, 107, 219-230.	5.8	29
41	An analytical model for strength prediction in multi-bolt composite joints at various loading rates. <i>Composite Structures</i> , 2014, 116, 300-310.	5.8	33
42	A study of intra-laminar damage in double-lap, multi-bolt, composite joints with variable clearance using continuum damage mechanics. <i>Composite Structures</i> , 2014, 116, 441-452.	5.8	41
43	Static and high-rate loading of single and multi-bolt carbon/epoxy aircraft fuselage joints. <i>Composites Part A: Applied Science and Manufacturing</i> , 2013, 53, 97-108.	7.6	60
44	Taguchi analysis of bonded composite single-lap joints using a combined interface/adhesive damage model. <i>International Journal of Adhesion and Adhesives</i> , 2013, 40, 168-178.	2.9	44
45	Micromechanical investigation of damage processes at composite-adhesive interfaces. <i>Composites Science and Technology</i> , 2013, 86, 61-69.	7.8	18
46	A three-scale finite element investigation into the effects of tissue mineralisation and lamellar organisation in human cortical and trabecular bone. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012, 12, 50-62.	3.1	66
47	Modelling a single-bolt countersunk composite joint using implicit and explicit finite element analysis. <i>Computational Materials Science</i> , 2012, 64, 203-208.	3.0	57
48	Investigation of strain hardening effects under in-plane shear of unidirectional composite materials. <i>Computational Materials Science</i> , 2012, 64, 179-182.	3.0	10
49	The effect of fibre constraint in the nanoindentation of fibrous composite microstructures: A finite element investigation. <i>Computational Materials Science</i> , 2012, 64, 162-167.	3.0	29
50	COMM Toolbox: A MATLAB toolbox for micromechanical analysis of composite materials. <i>Journal of Composite Materials</i> , 2012, 46, 1715-1729.	2.4	4
51	Effects of Shear-Transverse Coupling and Plasticity in the Formulation of an Elementary Ply Composites Damage Model, Part I: Model Formulation and Validation. <i>Strain</i> , 2012, 48, 49-58.	2.4	6
52	Effects of Shear-Transverse Coupling and Plasticity in the Formulation of an Elementary Ply Composites Damage Model, Part II: Material Characterisation. <i>Strain</i> , 2012, 48, 59-67.	2.4	3
53	Stress analysis of single-bolt, single-lap, countersunk composite joints with variable bolt-hole clearance. <i>Composite Structures</i> , 2012, 94, 1038-1051.	5.8	97
54	An analytical model for the prediction of through-thickness stiffness in tension-loaded composite bolted joints. <i>Composite Structures</i> , 2012, 94, 2450-2459.	5.8	43

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55	A micromechanical study on the effect of intra-ply properties on transverse shear fracture in fibre reinforced composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2011, 42, 1217-1228.	7.6	78
56	A highly efficient user-defined finite element for load distribution analysis of large-scale bolted composite structures. <i>Composites Science and Technology</i> , 2011, 71, 1517-1517.	7.8	65
57	Micromechanical modelling of the transverse damage behaviour in fibre reinforced composites. <i>Composites Science and Technology</i> , 2011, 71, 388-396.	7.8	280
58	Simulating damage and delamination in fibre metal laminate joints using a three-dimensional damage model with cohesive elements and damage regularisation. <i>Composites Science and Technology</i> , 2011, 71, 1225-1235.	7.8	49
59	An analytical model for the prediction of load distribution in highly torqued multi-bolt composite joints. <i>Composite Structures</i> , 2011, 93, 287-298.	5.8	116
60	Predicting the effects of geometry on the behaviour of fibre metal laminate joints. <i>Composite Structures</i> , 2011, 93, 1877-1889.	5.8	21
61	A combined experimentalâ€“numerical approach for generating statistically equivalent fibre distributions for high strength laminated composite materials. <i>Composites Science and Technology</i> , 2010, 70, 291-297.	7.8	176
62	On the sharpness of straight edge blades in cutting soft solids: Part II â€“ Analysis of blade geometry. <i>Engineering Fracture Mechanics</i> , 2010, 77, 437-451.	4.3	87
63	A cubic spline implementation of non-linear shear behaviour in three-dimensional progressive damage models for composite laminates. <i>Composite Structures</i> , 2010, 92, 173-181.	5.8	51
64	Comparison of open hole tension characteristics of high strength glass and carbon fibre-reinforced composite materials. <i>Composites Science and Technology</i> , 2008, 68, 2770-2778.	7.8	126
65	A comparative study of the pin-bearing responses of two glass-based fibre metal laminates. <i>Composites Science and Technology</i> , 2008, 68, 3314-3321.	7.8	17
66	On the sharpness of straight edge blades in cutting soft solids: Part I â€“ indentation experiments. <i>Engineering Fracture Mechanics</i> , 2007, 74, 2205-2224.	4.3	117
67	A simple method for determining the effects of boltâ€“hole clearance on load distribution in single-column multi-bolt composite joints. <i>Composite Structures</i> , 2006, 73, 78-87.	5.8	119
68	Three-dimensional finite element analysis of single-bolt, single-lap composite bolted joints: Part II â€“ effects of bolt-hole clearance. <i>Composite Structures</i> , 2005, 71, 159-175.	5.8	140
69	Three-dimensional finite element analysis of single-bolt, single-lap composite bolted joints: part I â€“ model development and validation. <i>Composite Structures</i> , 2005, 71, 140-158.	5.8	197
70	Modelling bird impacts on an aircraft wing â€“ Part 2: Modelling the impact with an SPH bird model. <i>International Journal of Crashworthiness</i> , 2005, 10, 51-59.	1.9	38
71	Experiences with Modeling Friction in Composite Bolted Joints. <i>Journal of Composite Materials</i> , 2005, 39, 1881-1908.	2.4	81
72	Modelling of Bird Strike on an Aircraft Wing Leading Edge Made from Fibre Metal Laminates â€“ Part 2: Modelling of Impact with SPH Bird Model. <i>Applied Composite Materials</i> , 2004, 11, 317-340.	2.5	151

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73	Experimental and Numerical Study of the Open-Hole Tensile Strength of Carbon/Epoxy Composites. <i>Mechanics of Composite Materials</i> , 2004, 40, 269-278.	1.4	30
74	BOLJAT: a tool for designing composite bolted joints using three-dimensional finite element analysis. <i>Composites Part A: Applied Science and Manufacturing</i> , 2002, 33, 1573-1584.	7.6	25
75	Bolt-hole clearance effects and strength criteria in single-bolt, single-lap, composite bolted joints. <i>Composites Science and Technology</i> , 2002, 62, 1415-1431.	7.8	193