# Michael A Mccarthy

## List of Publications by Citations



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|---|---|---|---|
| 73 papers | 2,986 citations | 32 h-index | 53 g-index |
| 77 ext. papers | 3,285 ext. citations | 5 avg, IF | 5.18 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 73 | Three-dimensional finite element analysis of single-bolt, single-lap composite bolted joints: part I—model development and validation. *Composite Structures*, **2005**, 71, 140-158 | 5.3 | 162 |
| 72 | Progressive damage analysis of multi-bolt composite joints with variable bolt–hole clearances. *Composites Part B: Engineering*, **2005**, 36, 290-305 | 10 | 158 |
| 71 | Bolt-hole clearance effects and strength criteria in single-bolt, single-lap, composite bolted joints. *Composites Science and Technology*, **2002**, 62, 1415-1431 | 8.6 | 152 |
| 70 | Modelling of Bird Strike on an Aircraft Wing Leading Edge Made from Fibre Metal Laminates – Part 2: Modelling of Impact with SPH Bird Model. *Applied Composite Materials*, **2004**, 11, 317-340 | 2 | 124 |
| 69 | Vibration response of double-walled carbon nanotubes subjected to an externally applied longitudinal magnetic field: A nonlocal elasticity approach. *Journal of Sound and Vibration*, **2012**, 331, 5069-5086 | 3.9 | 123 |
| 68 | Three-dimensional finite element analysis of single-bolt, single-lap composite bolted joints: Part II—effects of bolt-hole clearance. *Composite Structures*, **2005**, 71, 159-175 | 5.3 | 119 |
| 67 | Analysis of thick functionally graded plates by using higher-order shear and normal deformable plate theory and MLPG method with radial basis functions. *Composite Structures*, **2007**, 80, 539-552 | 5.3 | 106 |
| 66 | Mechanical characterisation of carbon fibre–PEEK manufactured by laser-assisted automated-tape-placement and autoclave. *Composites Part A: Applied Science and Manufacturing*, **2015**, 69, 10-20 | 8.4 | 104 |
| 65 | Comparison of open hole tension characteristics of high strength glass and carbon fibre-reinforced composite materials. *Composites Science and Technology*, **2008**, 68, 2770-2778 | 8.6 | 101 |
| 64 | A simple method for determining the effects of bolt–hole clearance on load distribution in single-column multi-bolt composite joints. *Composite Structures*, **2006**, 73, 78-87 | 5.3 | 99 |
| 63 | In-plane magnetic field affected transverse vibration of embedded single-layer graphene sheets using equivalent nonlocal elasticity approach. *Composite Structures*, **2013**, 96, 57-63 | 5.3 | 96 |
| 62 | An experimental study of bolt–hole clearance effects in double-lap, multi-bolt composite joints. *Composite Structures*, **2005**, 71, 176-190 | 5.3 | 82 |
| 61 | Stress analysis of single-bolt, single-lap, countersunk composite joints with variable bolt-hole clearance. *Composite Structures*, **2012**, 94, 1038-1051 | 5.3 | 79 |
| 60 | Multiwall nanotubes can be stronger than single wall nanotubes and implications for nanocomposite design. *Physical Review Letters*, **2009**, 103, 045502 | 7.4 | 69 |
| 59 | Analysis of thick composite laminates using a higher-order shear and normal deformable plate theory (HOSNDPT) and a meshless method. *Composites Part B: Engineering*, **2008**, 39, 414-427 | 10 | 69 |
| 58 | Numerical investigation of a crash test of a composite helicopter subfloor structure. *Composite Structures*, **2001**, 51, 345-359 | 5.3 | 66 |
| 57 | Experiences with Modeling Friction in Composite Bolted Joints. *Journal of Composite Materials*, **2005**, 39, 1881-1908 | 2.7 | 60 |

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| 56 | Dynamic finite element analysis of axially vibrating nonlocal rods. *Finite Elements in Analysis and Design*, **2013**, 63, 42-50 | 2.2 | 57 |
| 55 | Modelling bearing failure in countersunk composite joints under quasi-static loading using 3D explicit finite element analysis. *Composite Structures*, **2014**, 108, 963-977 | 5.3 | 50 |
| 54 | An Experimental Study of Bolt-Hole Clearance Effects in Single-lap, Multibolt Composite Joints. *Journal of Composite Materials*, **2005**, 39, 799-825 | 2.7 | 47 |
| 53 | A three dimensional implicit finite element damage model and its application to single-lap multi-bolt composite joints with variable clearance. *Composite Structures*, **2015**, 131, 1060-1072 | 5.3 | 46 |
| 52 | Modelling of Bird Strike on an Aircraft Wing Leading Edge Made from Fibre Metal Laminates Part 1: Material Modelling. *Applied Composite Materials*, **2004**, 11, 295-315 | 2 | 46 |
| 51 | Static and high-rate loading of single and multi-bolt carbon epoxy aircraft fuselage joints. *Composites Part A: Applied Science and Manufacturing*, **2013**, 53, 97-108 | 8.4 | 44 |
| 50 | Modelling a single-bolt countersunk composite joint using implicit and explicit finite element analysis. *Computational Materials Science*, **2012**, 64, 203-208 | 3.2 | 43 |
| 49 | Frequency domain analysis of nonlocal rods embedded in an elastic medium. *Physica E: Low-Dimensional Systems and Nanostructures*, **2014**, 59, 33-40 | 3 | 42 |
| 48 | Simulating damage and delamination in fibre metal laminate joints using a three-dimensional damage model with cohesive elements and damage regularisation. *Composites Science and Technology*, **2011**, 71, 1225-1235 | 8.6 | 42 |
| 47 | Analytic integration of kernel shape function product integrals in the boundary element method. *Computers and Structures*, **2001**, 79, 1325-1333 | 4.5 | 40 |
| 46 | BOJCAS: bolted joints in composite aircraft structures. *Air & Space Europe*, **2001**, 3, 139-142 | | 40 |
| 45 | An experimental investigation into the progression of damage in pin-loaded fibre metal laminates. *Composites Part B: Engineering*, **2008**, 39, 907-925 | 10 | 39 |
| 44 | A local Heaviside weighted meshless method for two-dimensional solids using radial basis functions. *Computational Mechanics*, **2003**, 31, 301-315 | 4 | 39 |
| 43 | Finite element analysis of effects of clearance on single shear composite bolted joints. *Plastics, Rubber and Composites*, **2003**, 32, 65-70 | 1.5 | 37 |
| 42 | Nonlocal elasticity based magnetic field affected vibration response of double single-walled carbon nanotube systems. *Journal of Applied Physics*, **2012**, 111, 113511 | 2.5 | 34 |
| 41 | A study of intra-laminar damage in double-lap, multi-bolt, composite joints with variable clearance using continuum damage mechanics. *Composite Structures*, **2014**, 116, 441-452 | 5.3 | 32 |
| 40 | Improved inter-tube coupling in CNT bundles through carbon ion irradiation. *Carbon*, **2013**, 51, 173-184 | 10.4 | 32 |
| 39 | Modelling bird impacts on an aircraft wing Part 2: Modelling the impact with an SPH bird model. *International Journal of Crashworthiness*, **2005**, 10, 51-59 | 1 | 32 |

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| 38 | Two-dimensional stress analysis of functionally graded solids using the MLPG method with radial basis functions. *Computational Materials Science*, **2008**, 41, 467-481 | 3.2 | 29 |
| 37 | Analysis of thick plates by using a higher-order shear and normal deformable plate theory and MLPG method with radial basis functions. *Computer Methods in Applied Mechanics and Engineering*, **2007**, 196, 979-987 | 5.7 | 28 |
| 36 | Characterisation of damage development in single shear bolted composite joints. *Plastics, Rubber and Composites*, **2002**, 31, 126-133 | 1.5 | 28 |
| 35 | Experimental and Numerical Study of the Open-Hole Tensile Strength of Carbon/Epoxy Composites. *Mechanics of Composite Materials*, **2004**, 40, 269-278 | 1.1 | 25 |
| 34 | BOLJAT: a tool for designing composite bolted joints using three-dimensional finite element analysis. *Composites Part A: Applied Science and Manufacturing*, **2002**, 33, 1573-1584 | 8.4 | 25 |
| 33 | Identification of Damage and Plasticity Parameters for Continuum Damage Mechanics Modelling of Carbon and Glass Fibre-Reinforced Composite Materials. *Strain*, **2011**, 47, 105-115 | 1.7 | 24 |
| 32 | Finite element modelling of crash response of composite aerospace sub-floor structures. *Computational Mechanics*, **2000**, 26, 250-258 | 4 | 23 |
| 31 | Optimizing load transfer in multiwall nanotubes through interwall coupling: Theory and simulation. *Acta Materialia*, **2010**, 58, 6324-6333 | 8.4 | 22 |
| 30 | A theoretical quantification of the possible improvement in the mechanical properties of carbon nanotube bundles by carbon ion irradiation. *Carbon*, **2013**, 53, 346-356 | 10.4 | 21 |
| 29 | Predicting the effects of geometry on the behaviour of fibre metal laminate joints. *Composite Structures*, **2011**, 93, 1877-1889 | 5.3 | 20 |
| 28 | Nonlocal normal modes in nanoscale dynamical systems. *Mechanical Systems and Signal Processing*, **2015**, 60-61, 583-603 | 7.8 | 19 |
| 27 | Axial Vibration of Embedded Nanorods Under Transverse Magnetic Field Effects via Nonlocal Elastic Continuum Theory. *Journal of Computational and Theoretical Nanoscience*, **2014**, 11, 1230-1236 | 0.3 | 19 |
| 26 | Measurement of load distribution in multibolt composite joints, in presence of varying clearance. *Plastics, Rubber and Composites*, **2002**, 31, 412-418 | 1.5 | 17 |
| 25 | A comparative study of the pin-bearing responses of two glass-based fibre metal laminates. *Composites Science and Technology*, **2008**, 68, 3314-3321 | 8.6 | 16 |
| 24 | Modelling bird impacts on an aircraft wing Part 1: Material modelling of the fibre metal laminate leading edge material with continuum damage mechanics. *International Journal of Crashworthiness*, **2005**, 10, 41-49 | 1 | 16 |
| 23 | Experimental study on effects of clearance on single bolt, single shear, composite bolted joints. *Plastics, Rubber and Composites*, **2002**, 31, 405-411 | 1.5 | 16 |
| 22 | Composite joints and connections **2011**, | | 13 |
| 21 | Meshless analysis of the obstacle problem for beams by the MLPG method and subdomain variational formulations. *European Journal of Mechanics, A/Solids*, **2003**, 22, 385-399 | 3.7 | 11 |

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| 20 | Predicting Failure in Multi-Bolt Composite Joints Using Finite Element Analysis and Bearing-Bypass Diagrams. *Key Engineering Materials*, **2005**, 293-294, 591-598 | 0.4 | 11 |
| 19 | Fracture toughness of carbon fiber/polyether ether ketone composites manufactured by autoclave and laser-assisted automated tape placement. *Journal of Applied Polymer Science*, **2014**, 132, n/a-n/a | 2.9 | 10 |
| 18 | Meshless analysis of Timoshenko beams based on a locking-free formulation and variational approaches. *Computer Methods in Applied Mechanics and Engineering*, **2003**, 192, 4403-4424 | 5.7 | 10 |
| 17 | Measurement of Bolt Pre-load in Torqued Composite Joints. *Strain*, **2005**, 41, 109-112 | 1.7 | 10 |
| 16 | PET interleaving veils for improved fracture toughness of glass fibre/low-styrene-emission unsaturated polyester resin composites. *Journal of Applied Polymer Science*, **2016**, 133, n/a-n/a | 2.9 | 9 |
| 15 | Pullout of rough multiwall carbon nanotubes: A parametric study. *Composites Part A: Applied Science and Manufacturing*, **2014**, 56, 93-102 | 8.4 | 9 |
| 14 | Finite element analysis of catastrophic failure of dynamically-loaded countersunk composite fuselage joints. *Composite Structures*, **2015**, 133, 1198-1208 | 5.3 | 6 |
| 13 | Potential routes to stronger carbon nanotube fibres via carbon ion irradiation and deposition. *Carbon*, **2016**, 96, 1138-1156 | 10.4 | 6 |
| 12 | Effects of Shear-Transverse Coupling and Plasticity in the Formulation of an Elementary Ply Composites Damage Model, Part I: Model Formulation and Validation. *Strain*, **2012**, 48, 49-58 | 1.7 | 6 |
| 11 | Toughening effects of interleaved nylon veils on glass fabric/low-styrene-emission unsaturated polyester resin composites. *Journal of Applied Polymer Science*, **2015**, 132, n/a-n/a | 2.9 | 5 |
| 10 | Numerical method to control high levels of damage growth using an implicit finite element solver applied to notched cross-ply laminates. *Composite Structures*, **2014**, 110, 51-61 | 5.3 | 5 |
| 9 | The influence of hot deformation on the exfoliation corrosion behaviour of aluminium alloy 2025. *Journal of Materials Processing Technology*, **2004**, 153-154, 185-192 | 5.3 | 5 |
| 8 | Design and failure analysis of composite bolted joints for aerospace composites **2015**, 295-334 | | 2 |
| 7 | Effects of Shear-Transverse Coupling and Plasticity in the Formulation of an Elementary Ply Composites Damage Model, Part II: Material Characterisation. *Strain*, **2012**, 48, 59-67 | 1.7 | 2 |
| 6 | Effects of Variable Clearance in Multi-Bolt Composite Joints. *Advanced Composites Letters*, **2004**, 13, 096369350401300 | 1.2 | 2 |
| 5 | The Influence of Processing and Microstructural Parameters on the Exfoliation Corrosion Susceptibility of 2025. *Materials Science Forum*, **2002**, 396-402, 1419-1424 | 0.4 | 2 |
| 4 | Improved Mechanical Performance of CNTs and CNT Fibres in Nanocomposites Through Inter-Wall and Inter-Tube Coupling. *Springer Series in Materials Science*, **2014**, 1-56 | 0.9 | 2 |
| 3 | On the use of radial basis functions in a local weighted meshless method **2003**, 2182-2185 | | 1 |

2 A model of strength. *Science*, **2013**, 342, 192-3 33.3

1 The Development of a Continuum Damage Model for Fibre Metal Laminate Structures **2006**, 365-365