Guangyong Sun

List of Publications by Year in descending order

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| | | 9775 | 28275 |
|---------|----------------|-----------------------|----------------|
| 216 | 14,092 | 73 | 105 |
| papers | citations | h-index | g-index |
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| 217 | 217 | 217 times replaced | 4840 |
| an docs | does citations | times ranked | citing authors |

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | On design optimization for structural crashworthiness and its state of the art. Structural and Multidisciplinary Optimization, 2017, 55, 1091-1119. | 1.7 | 312 |
| 2 | Crashworthiness design for functionally graded foam-filled thin-walled structures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1911-1919. | 2.6 | 262 |
| 3 | Crashing analysis and multiobjective optimization for thin-walled structures with functionally graded thickness. International Journal of Impact Engineering, 2014, 64, 62-74. | 2.4 | 245 |
| 4 | On design of multi-cell tubes under axial and oblique impact loads. Thin-Walled Structures, 2015, 95, 115-126. | 2.7 | 221 |
| 5 | Crashworthiness analysis and design of multi-cell hexagonal columns under multiple loading cases. Finite Elements in Analysis and Design, 2015, 104, 89-101. | 1.7 | 220 |
| 6 | Experimental study on crashworthiness of empty/aluminum foam/honeycomb-filled CFRP tubes. Composite Structures, 2016, 152, 969-993. | 3.1 | 193 |
| 7 | Experimental and numerical study on honeycomb sandwich panels under bending and in-panel compression. Materials and Design, 2017, 133, 154-168. | 3.3 | 193 |
| 8 | Crashworthiness optimization of foam-filled tapered thin-walled structure using multiple surrogate models. Structural and Multidisciplinary Optimization, 2013, 47, 221-231. | 1.7 | 192 |
| 9 | Crashworthiness design of vehicle by using multiobjective robust optimization. Structural and Multidisciplinary Optimization, 2011, 44, 99-110. | 1.7 | 187 |
| 10 | Energy absorption of metal, composite and metal/composite hybrid structures under oblique crushing loading. International Journal of Mechanical Sciences, 2018, 135, 458-483. | 3.6 | 187 |
| 11 | Lightweight design of carbon twill weave fabric composite body structure for electric vehicle. Composite Structures, 2013, 97, 231-238. | 3.1 | 186 |
| 12 | Dynamic crashing behavior of new extrudable multi-cell tubes with a functionally graded thickness. International Journal of Mechanical Sciences, 2015, 103, 63-73. | 3.6 | 186 |
| 13 | On design of multi-cell thin-wall structures for crashworthiness. International Journal of Impact Engineering, 2016, 88, 102-117. | 2.4 | 180 |
| 14 | Crashworthiness of vertex based hierarchical honeycombs in out-of-plane impact. Materials and Design, 2016, 110, 705-719. | 3.3 | 176 |
| 15 | Parameterization of criss-cross configurations for multiobjective crashworthiness optimization. International Journal of Mechanical Sciences, 2017, 124-125, 145-157. | 3.6 | 174 |
| 16 | On hierarchical honeycombs under out-of-plane crushing. International Journal of Solids and Structures, 2018, 135, 1-13. | 1.3 | 168 |
| 17 | Optimization of foam-filled bitubal structures for crashworthiness criteria. Materials & Design, 2012, 38, 99-109. | 5.1 | 162 |
| 18 | Out-of-plane crashworthiness of bio-inspired self-similar regular hierarchical honeycombs. Composite Structures, 2016, 144, 1-13. | 3.1 | 153 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | A comparative study on thin-walled structures with functionally graded thickness (FGT) and tapered tubes withstanding oblique impact loading. International Journal of Impact Engineering, 2015, 77, 68-83. | 2.4 | 141 |
| 20 | Parametric analysis and multiobjective optimization for functionally graded foam-filled thin-wall tube under lateral impact. Computational Materials Science, 2014, 90, 265-275. | 1.4 | 139 |
| 21 | Modeling for CFRP structures subjected to quasi-static crushing. Composite Structures, 2018, 184, 41-55. | 3.1 | 137 |
| 22 | Low velocity impact behavior of interlayer hybrid composite laminates with carbon/glass/basalt fibres. Composites Part B: Engineering, 2019, 176, 107191. | 5.9 | 137 |
| 23 | Experimental investigation of the quasi-static axial crushing behavior of filament-wound CFRP and aluminum/CFRP hybrid tubes. Composite Structures, 2018, 194, 208-225. | 3.1 | 132 |
| 24 | A two-stage multi-fidelity optimization procedure for honeycomb-type cellular materials. Computational Materials Science, 2010, 49, 500-511. | 1.4 | 131 |
| 25 | Lightweight hybrid materials and structures for energy absorption: A state-of-the-art review and outlook. Thin-Walled Structures, 2022, 172, 108760. | 2.7 | 130 |
| 26 | Experimental and numerical investigation into the crashworthiness of metal-foam-composite hybrid structures. Composite Structures, 2019, 209, 535-547. | 3.1 | 129 |
| 27 | On crushing characteristics of different configurations of metal-composites hybrid tubes. Composite Structures, 2017, 175, 58-69. | 3.1 | 128 |
| 28 | Theoretical prediction and optimization of multi-cell hexagonal tubes under axial crashing. Thin-Walled Structures, 2016, 102, 111-121. | 2.7 | 125 |
| 29 | High-velocity impact behaviour of aluminium honeycomb sandwich panels with different structural configurations. International Journal of Impact Engineering, 2018, 122, 119-136. | 2.4 | 124 |
| 30 | Crushing analysis of foam-filled single and bitubal polygonal thin-walled tubes. International Journal of Mechanical Sciences, 2014, 87, 226-240. | 3.6 | 123 |
| 31 | Energy absorption mechanics for variable thickness thin-walled structures. Thin-Walled Structures, 2017, 118, 214-228. | 2.7 | 123 |
| 32 | Experimental and numerical studies on indentation and perforation characteristics of honeycomb sandwich panels. Composite Structures, 2018, 184, 110-124. | 3.1 | 121 |
| 33 | Effect of structural parameters on low-velocity impact behavior of aluminum honeycomb sandwich structures with CFRP face sheets. Thin-Walled Structures, 2019, 137, 411-432. | 2.7 | 121 |
| 34 | Mechanical properties of hybrid composites reinforced by carbon and basalt fibers. International Journal of Mechanical Sciences, 2018, 148, 636-651. | 3.6 | 119 |
| 35 | On crashworthiness design of hybrid metal-composite structures. International Journal of Mechanical Sciences, 2020, 171, 105380. | 3.6 | 117 |
| 36 | Multiobjective robust optimization method for drawbead design in sheet metal forming. Materials & Design, 2010, 31, 1917-1929. | 5.1 | 116 |

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| 37 | Energy absorption mechanics and design optimization of CFRP/aluminium hybrid structures for transverse loading. International Journal of Mechanical Sciences, 2019, 150, 767-783. | 3.6 | 116 |
| 38 | Multiobjective optimization for tapered circular tubes. Thin-Walled Structures, 2011, 49, 855-863. | 2.7 | 113 |
| 39 | Comparative study on metal/CFRP hybrid structures under static and dynamic loading. International Journal of Impact Engineering, 2020, 141, 103509. | 2.4 | 112 |
| 40 | On functionally graded composite structures for crashworthiness. Composite Structures, 2015, 132, 393-405. | 3.1 | 109 |
| 41 | Crashworthiness design for functionally graded foam-filled bumper beam. Advances in Engineering Software, 2015, 85, 81-95. | 1.8 | 109 |
| 42 | Low-velocity impact behaviour of sandwich panels with homogeneous and stepwise graded foam cores. Materials and Design, 2018, 160, 1117-1136. | 3.3 | 109 |
| 43 | On low-velocity impact response of foam-core sandwich panels. International Journal of Mechanical Sciences, 2020, 181, 105681. | 3.6 | 105 |
| 44 | Global and Local Surrogate-Assisted Differential Evolution for Expensive Constrained Optimization Problems With Inequality Constraints. IEEE Transactions on Cybernetics, 2019, 49, 1642-1656. | 6.2 | 104 |
| 45 | Multiobjective reliability-based optimization for design of a vehicledoor. Finite Elements in Analysis and Design, 2013, 67, 13-21. | 1.7 | 103 |
| 46 | Topological configuration analysis and design for foam filled multi-cell tubes. Engineering Structures, 2018, 155, 235-250. | 2.6 | 103 |
| 47 | Crashworthiness design for foam-filled thin-walled structures with functionally lateral graded thickness sheets. Thin-Walled Structures, 2015, 91, 63-71. | 2.7 | 102 |
| 48 | A Comparative study on multiobjective reliable and robust optimization for crashworthiness design of vehicle structure. Structural and Multidisciplinary Optimization, 2013, 48, 669-684. | 1.7 | 101 |
| 49 | Experimental study on the dynamic responses of foam sandwich panels with different facesheets and core gradients subjected to blast impulse. International Journal of Impact Engineering, 2020, 135, 103327. | 2.4 | 100 |
| 50 | A new multi-objective discrete robust optimization algorithm for engineering design. Applied Mathematical Modelling, 2018, 53, 602-621. | 2.2 | 98 |
| 51 | Multi-objective and multi-case reliability-based design optimization for tailor rolled blank (TRB) structures. Structural and Multidisciplinary Optimization, 2017, 55, 1899-1916. | 1.7 | 97 |
| 52 | Flexural performance and cost efficiency of carbon/basalt/glass hybrid FRP composite laminates. Thin-Walled Structures, 2019, 142, 516-531. | 2.7 | 97 |
| 53 | On the structural parameters of honeycomb-core sandwich panels against low-velocity impact. Composites Part B: Engineering, 2021, 216, 108881. | 5.9 | 97 |
| 54 | Crushing analysis and multiobjective optimization for functionally graded foam-filled tubes under multiple load cases. International Journal of Mechanical Sciences, 2014, 89, 439-452. | 3.6 | 96 |

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| 55 | Theoretical, numerical, and experimental study on laterally variable thickness (LVT) multi-cell tubes for crashworthiness. International Journal of Mechanical Sciences, 2016, 118, 283-297. | 3.6 | 96 |
| 56 | Dynamic response of sandwich panel with hierarchical honeycomb cores subject to blast loading. Thin-Walled Structures, 2019, 142, 499-515. | 2.7 | 96 |
| 57 | Surface morphology optimization for osseointegration of coated implants. Biomaterials, 2010, 31, 7196-7204. | 5.7 | 94 |
| 58 | Multiobjective robust design optimization of fatigue life for a truck cab. Reliability Engineering and System Safety, 2015, 135, 1-8. | 5.1 | 89 |
| 59 | Design of transversely-graded foam and wall thickness structures for crashworthiness criteria. Composites Part B: Engineering, 2016, 92, 338-349. | 5.9 | 89 |
| 60 | Crashworthiness analysis and optimization of sinusoidal corrugation tube. Thin-Walled Structures, 2016, 105, 121-134. | 2.7 | 88 |
| 61 | Multiobjective crashworthiness optimization of hollow and conical tubes for multiple load cases. Thin-Walled Structures, 2014, 82, 331-342. | 2.7 | 86 |
| 62 | Robust optimization of foam-filled thin-walled structure based on sequential Kriging metamodel. Structural and Multidisciplinary Optimization, 2014, 49, 897-913. | 1.7 | 85 |
| 63 | Crushing analysis and design optimization for foam-filled aluminum/CFRP hybrid tube against transverse impact. Composites Part B: Engineering, 2020, 196, 108029. | 5.9 | 85 |
| 64 | On fracture characteristics of adhesive joints with dissimilar materials – An experimental study using digital image correlation (DIC) technique. Composite Structures, 2018, 201, 1056-1075. | 3.1 | 84 |
| 65 | Computational analysis and optimization of sandwich panels with homogeneous and graded foam cores for blast resistance. Thin-Walled Structures, 2020, 147, 106494. | 2.7 | 84 |
| 66 | Equivalent Circuit Derivation and Performance Analysis of a Single-Sided Linear Induction Motor Based on the Winding Function Theory. IEEE Transactions on Vehicular Technology, 2012, 61, 1515-1525. | 3.9 | 82 |
| 67 | Crashworthiness analysis of octagonal multi-cell tube with functionally graded thickness under multiple loading angles. Thin-Walled Structures, 2017, 110, 133-139. | 2.7 | 82 |
| 68 | On design of graded honeycomb filler and tubal wall thickness for multiple load cases. Thin-Walled Structures, 2016, 109, 377-389. | 2.7 | 81 |
| 69 | On crashing behaviors of aluminium/CFRP tubes subjected to axial and oblique loading: An experimental study. Composites Part B: Engineering, 2018, 145, 47-56. | 5.9 | 80 |
| 70 | Topology optimization for microstructures of viscoelastic composite materials. Computer Methods in Applied Mechanics and Engineering, 2015, 283, 503-516. | 3.4 | 79 |
| 71 | Energy absorption mechanism of axially-varying thickness (AVT) multicell thin-walled structures under out-of-plane loading. Engineering Structures, 2019, 196, 109130. | 2.6 | 79 |
| 72 | Experimental study on low-velocity impact responses and residual properties of composite sandwiches with metallic foam core. Composite Structures, 2019, 223, 110835. | 3.1 | 79 |

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| 73 | Radial basis functional model for multi-objective sheet metal forming optimization. Engineering Optimization, 2011, 43, 1351-1366. | 1.5 | 78 |
| 74 | On lateral compression of circular aluminum, CFRP and GFRP tubes. Composite Structures, 2020, 232, 111534. | 3.1 | 78 |
| 75 | On impact behavior of fiber metal laminate (FML) structures: A state-of-the-art review. Thin-Walled Structures, 2021, 167, 108026. | 2.7 | 78 |
| 76 | Crashworthiness analysis and optimization of fourier varying section tubes. International Journal of Non-Linear Mechanics, 2017, 92, 41-58. | 1.4 | 76 |
| 77 | Phase field fracture in elasto-plastic solids: Abaqus implementation and case studies. Theoretical and Applied Fracture Mechanics, 2019, 103, 102252. | 2.1 | 76 |
| 78 | Comparison of functionally-graded structures under multiple loading angles. Thin-Walled Structures, 2015, 94, 334-347. | 2.7 | 75 |
| 79 | Topology optimization for negative permeability metamaterials using level-set algorithm. Acta Materialia, 2011, 59, 2624-2636. | 3.8 | 73 |
| 80 | Dynamical bending analysis and optimization design for functionally graded thickness (FGT) tube. International Journal of Impact Engineering, 2015, 78, 128-137. | 2.4 | 73 |
| 81 | Crashworthiness design of foam-filled bitubal structures with uncertainty. International Journal of Non-Linear Mechanics, 2014, 67, 120-132. | 1.4 | 72 |
| 82 | Sensitivity analysis and reliability based design optimization for high-strength steel tailor welded thin-walled structures under crashworthiness. Thin-Walled Structures, 2016, 109, 132-142. | 2.7 | 72 |
| 83 | Nondeterministic optimization of tapered sandwich column for crashworthiness. Thin-Walled Structures, 2018, 122, 193-207. | 2.7 | 71 |
| 84 | A level-set procedure for the design of electromagnetic metamaterials. Optics Express, 2010, 18, 6693. | 1.7 | 67 |
| 85 | Configurational optimization of multi-cell topologies for multiple oblique loads. Structural and Multidisciplinary Optimization, 2018, 57, 469-488. | 1.7 | 67 |
| 86 | Crashworthiness design of vehicle structure with tailor rolled blank. Structural and Multidisciplinary Optimization, 2016, 53, 321-338. | 1.7 | 66 |
| 87 | Multiobjective robust optimization for crashworthiness design of foam filled thin-walled structures with random and interval uncertainties. Engineering Structures, 2015, 88, 111-124. | 2.6 | 65 |
| 88 | Investigation on impact behavior of FMLs under multiple impacts with the same total energy: Experimental characterization and numerical simulation. Composite Structures, 2019, 226, 111218. | 3.1 | 65 |
| 89 | 3D printing of chiral carbon fiber reinforced polylactic acid composites with negative Poisson's ratios. Composites Part B: Engineering, 2020, 201, 108400. | 5.9 | 65 |
| 90 | Bending characteristics of top-hat structures through tailor rolled blank (TRB) process. Thin-Walled Structures, 2018, 123, 420-440. | 2.7 | 65 |

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| 91 | Phase field fracture in elasto-plastic solids: Variational formulation for multi-surface plasticity and effects of plastic yield surfaces and hardening. International Journal of Mechanical Sciences, 2019, 156, 382-396. | 3.6 | 62 |
| 92 | Quasi-static bending and transverse crushing behaviors for hat-shaped composite tubes made of CFRP, GFRP and their hybrid structures. Composite Structures, 2020, 239, 111842. | 3.1 | 62 |
| 93 | Experimental study on crashworthiness of tailor-welded blank (TWB) thin-walled high-strength steel (HSS) tubular structures. Thin-Walled Structures, 2014, 74, 12-27. | 2.7 | 61 |
| 94 | An experimental and numerical study on quasi-static and dynamic crashing behaviors for tailor rolled blank (TRB) structures. Materials and Design, 2017, 118, 175-197. | 3.3 | 61 |
| 95 | Crashworthiness design of multi-component tailor-welded blank (TWB) structures. Structural and Multidisciplinary Optimization, 2013, 48, 653-667. | 1.7 | 60 |
| 96 | Design for cost performance of crashworthy structures made of high strength steel. Thin-Walled Structures, 2019, 138, 458-472. | 2.7 | 60 |
| 97 | Retardation of surface corrosion of biodegradable magnesium-based materials by aluminum ion implantation. Applied Surface Science, 2012, 258, 7651-7657. | 3.1 | 59 |
| 98 | A method to evaluate the formability of high-strength steel in hot stamping. Materials & Design, 2015, 77, 95-109. | 5.1 | 58 |
| 99 | Crashworthiness optimization of automotive parts with tailor rolled blank. Engineering Structures, 2018, 169, 201-215. | 2.6 | 58 |
| 100 | On energy absorption of functionally graded tubes under transverse loading. International Journal of Mechanical Sciences, 2016, 115-116, 465-480. | 3.6 | 57 |
| 101 | Topological design of multi-cell hexagonal tubes under axial and lateral loading cases using a modified particle swarm algorithm. Applied Mathematical Modelling, 2018, 53, 567-583. | 2.2 | 57 |
| 102 | Multi-fidelity optimization for sheet metal forming process. Structural and Multidisciplinary Optimization, 2011, 44, 111-124. | 1.7 | 56 |
| 103 | Discrete robust optimization algorithm based on Taguchi method for structural crashworthiness design. Expert Systems With Applications, 2015, 42, 4482-4492. | 4.4 | 56 |
| 104 | Residual crashworthiness of CFRP structures with pre-impact damage – An experimental and numerical study. International Journal of Mechanical Sciences, 2018, 149, 122-135. | 3.6 | 56 |
| 105 | A bio-inspired foam-filled multi-cell structural configuration for energy absorption. Composites Part B: Engineering, 2022, 238, 109801. | 5.9 | 56 |
| 106 | Two-scale optimal design of structures with thermal insulation materials. Composite Structures, 2015, 120, 358-365. | 3.1 | 55 |
| 107 | Analysis of elastic–plastic problems using edge-based smoothed finite element method. International Journal of Pressure Vessels and Piping, 2009, 86, 711-718. | 1.2 | 54 |
| 108 | Comparative study on aluminum/GFRP/CFRP tubes for oblique lateral crushing. Thin-Walled Structures, 2020, 152, 106420. | 2.7 | 54 |

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| 109 | Variable fidelity design based surrogate and artificial bee colony algorithm for sheet metal forming process. Finite Elements in Analysis and Design, 2012, 59, 76-90. | 1.7 | 53 |
| 110 | A Two-Phase Differential Evolution for Uniform Designs in Constrained Experimental Domains. IEEE Transactions on Evolutionary Computation, 2017, 21, 665-680. | 7.5 | 53 |
| 111 | Multiobjective robust optimization of coronary stents. Materials and Design, 2016, 90, 682-692. | 3.3 | 51 |
| 112 | Topological design of phononic crystals for unidirectional acoustic transmission. Journal of Sound and Vibration, 2017, 410, 103-123. | 2.1 | 51 |
| 113 | Residual flexural properties of CFRP sandwich structures with aluminum honeycomb cores after low-velocity impact. International Journal of Mechanical Sciences, 2019, 161-162, 105026. | 3.6 | 51 |
| 114 | An experimental study on fatigue characteristics of CFRP-steel hybrid laminates. Materials and Design, 2015, 88, 643-650. | 3.3 | 50 |
| 115 | Maximizing spatial decay of evanescent waves in phononic crystals by topology optimization. Computers and Structures, 2017, 182, 430-447. | 2.4 | 50 |
| 116 | On twist springback in advanced high-strength steels. Materials & Design, 2011, 32, 3272-3279. | 5.1 | 45 |
| 117 | Multiobjective reliability-based optimization for crashworthy structures coupled with metal forming process. Structural and Multidisciplinary Optimization, 2017, 56, 1571-1587. | 1.7 | 45 |
| 118 | Determination of mechanical properties of the weld line by combining micro-indentation with inverse modeling. Computational Materials Science, 2014, 85, 347-362. | 1.4 | 42 |
| 119 | On failure mechanisms in CFRP/Al adhesive joints after hygrothermal aging degradation following by mechanical tests. Thin-Walled Structures, 2021, 158, 107184. | 2.7 | 41 |
| 120 | Design optimization of bioinspired helicoidal CFRPP/GFRPP hybrid composites for multiple low-velocity impact loads. International Journal of Mechanical Sciences, 2022, 219, 107064. | 3.6 | 41 |
| 121 | Characterization of initial and subsequent yield behaviors of closed-cell aluminum foams under multiaxial loadings. Composites Part B: Engineering, 2020, 202, 108247. | 5.9 | 40 |
| 122 | On lateral crashworthiness of aluminum/composite hybrid structures. Composite Structures, 2020, 245, 112334. | 3.1 | 40 |
| 123 | Experimental investigation on high strength steel (HSS) tailor-welded blanks (TWBs). Journal of Materials Processing Technology, 2014, 214, 925-935. | 3.1 | 39 |
| 124 | Experimental investigation into transverse crashworthiness of CFRP adhesively bonded joints in vehicle structure. Composite Structures, 2013, 106, 581-589. | 3.1 | 37 |
| 125 | Failure mechanisms in carbon fiber reinforced plastics (CFRP) / aluminum (Al) adhesive bonds subjected to low-velocity transverse pre-impact following by axial post-tension. Composites Part B: Engineering, 2019, 172, 339-351. | 5.9 | 37 |
| 126 | Identification of mechanical properties of the weld line by combining 3D digital image correlation with inverse modeling procedure. International Journal of Advanced Manufacturing Technology, 2014, 74, 893-905. | 1.5 | 35 |

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| 127 | Multi-objective topology optimization of a vehicle door using multiple material tailor-welded blank (TWB) technology. Advances in Engineering Software, 2018, 124, 1-9. | 1.8 | 35 |
| 128 | Experimental study on residual properties of carbon fibre reinforced plastic (CFRP) and aluminum single-lap adhesive joints at different strain rates after transverse pre-impact. Composites Part A: Applied Science and Manufacturing, 2019, 124, 105372. | 3.8 | 35 |
| 129 | Digital image correlation (DIC) based damage detection for CFRP laminates by using machine learning based image semantic segmentation. International Journal of Mechanical Sciences, 2022, 230, 107529. | 3.6 | 35 |
| 130 | Microstructural evolution in NiTi alloy subjected to surface mechanical attrition treatment and mechanism. Intermetallics, 2011, 19, 1136-1145. | 1.8 | 34 |
| 131 | Crashworthiness study on functionally graded thin-walled structures. International Journal of Crashworthiness, 2015, 20, 280-300. | 1.1 | 34 |
| 132 | Topology Optimization of Multicell Tubes Under Out-of-Plane Crushing Using a Modified Artificial Bee Colony Algorithm. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, . | 1.7 | 34 |
| 133 | Phase field fracture in elasto-plastic solids: a length-scale insensitive model for quasi-brittle materials. Computational Mechanics, 2020, 66, 931-961. | 2.2 | 34 |
| 134 | Wear resistance of NiTi alloy after surface mechanical attrition treatment. Surface and Coatings Technology, 2010, 205, 506-510. | 2.2 | 33 |
| 135 | An uncertain multidisciplinary design optimization method using interval convex models. Engineering Optimization, 2013, 45, 697-718. | 1.5 | 33 |
| 136 | Additively manufactured fiber-reinforced composites: A review of mechanical behavior and opportunities. Journal of Materials Science and Technology, 2022, 119, 219-244. | 5.6 | 33 |
| 137 | A study on the critical wall thickness of the inner tube for magnetic pulse welding of tubular Al–Fe parts. Journal of Materials Processing Technology, 2016, 227, 138-146. | 3.1 | 32 |
| 138 | Crashworthiness optimization with uncertainty from surrogate model and numerical error. Thin-Walled Structures, 2018, 129, 457-472. | 2.7 | 32 |
| 139 | Multi-objective system reliability-based optimization method for design of a fully parametric concept car body. Engineering Optimization, 2017, 49, 1247-1263. | 1.5 | 30 |
| 140 | A novel failure criterion based upon forming limit curve for thermoplastic composites. Composites Part B: Engineering, 2020, 202, 108320. | 5.9 | 30 |
| 141 | Inverse identification of cell-wall material properties of closed-cell aluminum foams based upon Vickers nano-indentation tests. International Journal of Mechanical Sciences, 2020, 176, 105524. | 3.6 | 30 |
| 142 | Multiobjective optimization design for vehicle occupant restraint system under frontal impact. Structural and Multidisciplinary Optimization, 2013, 47, 465-477. | 1.7 | 29 |
| 143 | Tensile performance of basalt fiber composites with open circular holes and straight notches. International Journal of Mechanical Sciences, 2020, 176, 105517. | 3.6 | 29 |
| 144 | Comparison of impact resistance of carbon fibre composites with multiple ultra-thin CNT, aramid pulp, PBO and graphene interlayers. Composites Part A: Applied Science and Manufacturing, 2022, 155, 106815. | 3.8 | 29 |

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| 145 | Fatigue behavior of CFRP/Al adhesive joints — Failure mechanisms study using digital image correlation (DIC) technique. Thin-Walled Structures, 2022, 174, 109075. | 2.7 | 29 |
| 146 | The finite element analysis of austenite decomposition during continuous cooling in 22MnB5 steel. Modelling and Simulation in Materials Science and Engineering, 2014, 22, 065005. | 0.8 | 28 |
| 147 | Specific wave interface and its formation during magnetic pulse welding. Applied Physics Letters, 2014, 105, 221901. | 1.5 | 28 |
| 148 | Parallelized multiobjective efficient global optimization algorithm and its applications. Structural and Multidisciplinary Optimization, 2020, 61, 763-786. | 1.7 | 28 |
| 149 | Levelâ€set topology optimization for maximizing fracture resistance of brittle materials using phaseâ€field fracture model. International Journal for Numerical Methods in Engineering, 2020, 121, 2929-2945. | 1.5 | 28 |
| 150 | Fatigue behavior of carbon fibre reinforced plastic and aluminum single-lap adhesive joints after the transverse pre-impact. International Journal of Fatigue, 2021, 144, 105973. | 2.8 | 28 |
| 151 | Vibration-based damage identification in composite plates using 3D-DIC and wavelet analysis. Mechanical Systems and Signal Processing, 2022, 173, 108890. | 4.4 | 28 |
| 152 | Identification of material parameters for aluminum foam at high strain rate. Computational Materials Science, 2013, 74, 65-74. | 1.4 | 27 |
| 153 | Nondestructive characterization of bone tissue scaffolds for clinical scenarios. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 89, 150-161. | 1.5 | 27 |
| 154 | Optimizaition for formability of plain woven carbon fiber fabrics. International Journal of Mechanical Sciences, 2021, 197, 106318. | 3.6 | 27 |
| 155 | Topology Optimization of an Automotive Tailor-Welded Blank Door. Journal of Mechanical Design, Transactions of the ASME, 2015, 137, . | 1.7 | 26 |
| 156 | On the effects of temperature on tensile behavior of carbon fiber reinforced epoxy laminates. Thin-Walled Structures, 2021, 164, 107769. | 2.7 | 26 |
| 157 | Design and fabrication of biphasic cellular materials with transport properties – A modified bidirectional evolutionary structural optimization procedure and MATLAB program. International Journal of Heat and Mass Transfer, 2012, 55, 8149-8162. | 2.5 | 25 |
| 158 | Failure analysis for resistance spot welding in lap-shear specimens. International Journal of Mechanical Sciences, 2014, 78, 154-166. | 3.6 | 25 |
| 159 | Multiobjective sequential optimization for a vehicle door using hybrid materials tailor-welded structure. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2016, 230, 3092-3100. | 1.1 | 25 |
| 160 | Crashworthiness design of a steel–aluminum hybrid rail using multi-response objective-oriented sequential optimization. Advances in Engineering Software, 2017, 112, 192-199. | 1.8 | 25 |
| 161 | Topographical design of stiffener layout for plates against blast loading using a modified ant colony optimization algorithm. Structural and Multidisciplinary Optimization, 2019, 59, 335-350. | 1.7 | 25 |
| 162 | Topological design of structures under dynamic periodic loads. Engineering Structures, 2017, 142, 128-136. | 2.6 | 24 |

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| 163 | On multiaxial failure behavior of closed-cell aluminum foams under medium strain rates. Thin-Walled Structures, 2021, 160, 107278. | 2.7 | 24 |
| 164 | On quasi-static behaviors of different joint methods for connecting carbon fiber reinforce plastic (CFRP) laminate and aluminum alloy. Thin-Walled Structures, 2021, 164, 107657. | 2.7 | 24 |
| 165 | Fatigue optimization with combined ensembles of surrogate modeling for a truck cab. Journal of Mechanical Science and Technology, 2014, 28, 4641-4649. | 0.7 | 23 |
| 166 | A time-dependent mechanobiology-based topology optimization to enhance bone growth in tissue scaffolds. Journal of Biomechanics, 2021, 117, 110233. | 0.9 | 23 |
| 167 | High-impact resistant hybrid sandwich panel filled with shear thickening fluid. Composite Structures, 2022, 284, 115208. | 3.1 | 22 |
| 168 | Mechanical characterization and numerical modeling on the yield and fracture behaviors of polymethacrylimide (PMI) foam materials. International Journal of Mechanical Sciences, 2022, 218, 107033. | 3.6 | 22 |
| 169 | Parallelized optimization design of bumper systems under multiple low-speed impact loads. Thin-Walled Structures, 2021, 167, 108197. | 2.7 | 21 |
| 170 | On design of carbon fiber reinforced plastic (CFRP) laminated structure with different failure criteria. International Journal of Mechanical Sciences, 2021, 196, 106251. | 3.6 | 20 |
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