

Jihong Zhu

List of Publications by Year in descending order

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docs citations

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1871
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Collaborative optimization design of process parameter and structural topology for laser additive manufacturing. Chinese Journal of Aeronautics, 2023, 36, 456-467. | 2.8 | 6 |
| 2 | Shape preserving topology optimization for structural radar cross section control. Chinese Journal of Aeronautics, 2022, 35, 198-210. | 2.8 | 5 |
| 3 | Optimal and adaptive lattice design considering process-induced material anisotropy and geometric inaccuracy for additive manufacturing. Structural and Multidisciplinary Optimization, 2022, 65, 1. | 1.7 | 7 |
| 4 | Radar cross section minimization for step structures using topology optimization. Structural and Multidisciplinary Optimization, 2022, 65, 1. | 1.7 | 3 |
| 5 | Hierarchical structure optimization with parameterized lattice and multiscale finite element method. Structural and Multidisciplinary Optimization, 2022, 65, 1. | 1.7 | 15 |
| 6 | Roadmap for Additive Manufacturing: Toward Intellectualization and Industrialization. , 2022, 1, 100014. | | 15 |
| 7 | Development of lunar regolith composite and structure via laser-assisted sintering. Frontiers of Mechanical Engineering, 2022, 17, 1. | 2.5 | 3 |
| 8 | Shape preserving design with topology optimization for structures under harmonic resonance responses. Structural and Multidisciplinary Optimization, 2022, 65, . | 1.7 | 0 |
| 9 | Optimal design of chiral metamaterials with prescribed nonlinear properties. Structural and Multidisciplinary Optimization, 2021, 63, 595-611. | 1.7 | 5 |
| 10 | A review of topology optimization for additive manufacturing: Status and challenges. Chinese Journal of Aeronautics, 2021, 34, 91-110. | 2.8 | 316 |
| 11 | Multi-scale design and optimization for solid-lattice hybrid structures and their application to aerospace vehicle components. Chinese Journal of Aeronautics, 2021, 34, 386-398. | 2.8 | 44 |
| 12 | Integrated optimization design of smart morphing wing for accurate shape control. Chinese Journal of Aeronautics, 2021, 34, 135-147. | 2.8 | 26 |
| 13 | An all-movable rudder designed by thermo-elastic topology optimization and manufactured by additive manufacturing. Computers and Structures, 2021, 243, 106405. | 2.4 | 20 |
| 14 | Comment on "Optimal design of chiral metamaterials with prescribed nonlinear properties". Structural and Multidisciplinary Optimization, 2021, 63, 613-615. | 1.7 | 0 |
| 15 | Multidisciplinary topology optimization incorporating process-structure-property-performance relationship of additive manufacturing. Structural and Multidisciplinary Optimization, 2021, 63, 2141-2157. | 1.7 | 12 |
| 16 | Material-structure-performance integrated laser-metal additive manufacturing. Science, 2021, 372, . | 6.0 | 594 |
| 17 | Integrated batteries layout and structural topology optimization for a solar-powered drone. Chinese Journal of Aeronautics, 2021, 34, 114-123. | 2.8 | 6 |
| 18 | Concurrent optimization of sandwich structures lattice core and viscoelastic layers for suppressing resonance response. Structural and Multidisciplinary Optimization, 2021, 64, 1801-1824. | 1.7 | 5 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | A bio-inspired B-Spline Offset Feature for structural topology optimization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 386, 114081. | 3.4 | 9 |
| 20 | Thermomechanical modeling of nonlinear internal hysteresis due to incomplete phase transformation in pseudoelastic shape memory alloys. <i>Nonlinear Dynamics</i> , 2021, 103, 1393-1414. | 2.7 | 6 |
| 21 | Topology optimization of joint load control with geometrical nonlinearity. <i>Chinese Journal of Aeronautics</i> , 2020, 33, 372-382. | 2.8 | 15 |
| 22 | From Topology Optimization Design to Additive Manufacturing: Today's Success and Tomorrow's Roadmap. <i>Archives of Computational Methods in Engineering</i> , 2020, 27, 805-830. | 6.0 | 206 |
| 23 | Precise output loads control of load-diffusion components with topology optimization. <i>Chinese Journal of Aeronautics</i> , 2020, 33, 933-946. | 2.8 | 4 |
| 24 | Multiscale topology optimization using feature-driven method. <i>Chinese Journal of Aeronautics</i> , 2020, 33, 621-633. | 2.8 | 17 |
| 25 | Lightweight design of a bolt-flange sealing structure based on topology optimization. <i>Structural and Multidisciplinary Optimization</i> , 2020, 62, 3413-3428. | 1.7 | 11 |
| 26 | Fiber bundle topology optimization of hierarchical microtextures for wetting behavior in Cassie-Baxter mode. <i>Structural and Multidisciplinary Optimization</i> , 2020, 61, 2523-2556. | 1.7 | 1 |
| 27 | A new data-driven topology optimization framework for structural optimization. <i>Computers and Structures</i> , 2020, 239, 106310. | 2.4 | 34 |
| 28 | Additive manufacturing-driven design optimization: Building direction and structural topology. <i>Additive Manufacturing</i> , 2020, 36, 101406. | 1.7 | 36 |
| 29 | Shape preserving design of thermo-elastic structures considering geometrical nonlinearity. <i>Structural and Multidisciplinary Optimization</i> , 2020, 61, 1787-1804. | 1.7 | 11 |
| 30 | Numerical Model and Experimental Validation for Laser Sinterable Semi-Crystalline Polymer: Shrinkage and Warping. <i>Polymers</i> , 2020, 12, 1373. | 2.0 | 21 |
| 31 | A B-spline multi-parameterization method for multi-material topology optimization of thermoelastic structures. <i>Structural and Multidisciplinary Optimization</i> , 2020, 61, 923-942. | 1.7 | 16 |
| 32 | Concurrent design of hierarchical structures with three-dimensional parameterized lattice microstructures for additive manufacturing. <i>Structural and Multidisciplinary Optimization</i> , 2020, 61, 869-894. | 1.7 | 70 |
| 33 | Topology optimization design of nanofluid-cooled microchannel heat sink with temperature-dependent fluid properties. <i>Applied Thermal Engineering</i> , 2020, 176, 115354. | 3.0 | 44 |
| 34 | Designing Cellular Structures for Additive Manufacturing Using Voronoi's Monte Carlo Approach. <i>Polymers</i> , 2019, 11, 1158. | 2.0 | 16 |
| 35 | Structural topology optimization under stationary random base acceleration excitations. <i>Chinese Journal of Aeronautics</i> , 2019, 32, 1416-1427. | 2.8 | 11 |
| 36 | Shape preserving design of geometrically nonlinear structures using topology optimization. <i>Structural and Multidisciplinary Optimization</i> , 2019, 59, 1033-1051. | 1.7 | 20 |

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|----|---|-----|-----------|
| 37 | Note on spatial gradient operators and gradient-based minimum length constraints in SIMP topology optimization. <i>Structural and Multidisciplinary Optimization</i> , 2019, 60, 393-400. | 1.7 | 18 |
| 38 | Hot Corrosion Behavior of BaLa ₂ Ti ₃ O ₁₀ Thermal Barrier Ceramics in V ₂ O ₅ and Na ₂ SO ₄ + V ₂ O ₅ Molten Salts. <i>Coatings</i> , 2019, 9, 351. | 1.2 | 3 |
| 39 | Integrated layout and topology optimization design of multi-component systems under harmonic base acceleration excitations. <i>Structural and Multidisciplinary Optimization</i> , 2019, 59, 1053-1073. | 1.7 | 15 |
| 40 | Concurrent shape and topology optimization involving design-dependent pressure loads using implicit B-spline curves. <i>International Journal for Numerical Methods in Engineering</i> , 2019, 118, 495-518. | 1.5 | 12 |
| 41 | Integrated optimization of actuators and structural topology of piezoelectric composite structures for static shape control. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 334, 440-469. | 3.4 | 33 |
| 42 | Experimental validation of 3D printed material behaviors and their influence on the structural topology design. <i>Computational Mechanics</i> , 2018, 61, 581-598. | 2.2 | 41 |
| 43 | A review on the design of laminated composite structures: constant and variable stiffness design and topology optimization. <i>Advanced Composites and Hybrid Materials</i> , 2018, 1, 460-477. | 9.9 | 108 |
| 44 | Structural topology optimization for directional deformation behavior design with the orthotropic artificial weak element method. <i>Structural and Multidisciplinary Optimization</i> , 2018, 57, 1251-1266. | 1.7 | 7 |
| 45 | Structural topology optimization under harmonic base acceleration excitations. <i>Structural and Multidisciplinary Optimization</i> , 2018, 57, 1061-1078. | 1.7 | 33 |
| 46 | Microstructural defects induced by stereolithography and related compressive behaviour of polymers. <i>Journal of Materials Processing Technology</i> , 2018, 251, 37-46. | 3.1 | 32 |
| 47 | Topology optimization of the multi-fasteners jointed structure considering fatigue constraints. <i>International Journal for Simulation and Multidisciplinary Design Optimization</i> , 2018, 9, A4. | 0.6 | 2 |
| 48 | Concurrent topology optimization design of structures and non-uniform parameterized lattice microstructures. <i>Structural and Multidisciplinary Optimization</i> , 2018, 58, 35-50. | 1.7 | 78 |
| 49 | Functionally graded materials from topology optimisation and stereolithography. <i>European Polymer Journal</i> , 2018, 108, 199-211. | 2.6 | 34 |
| 50 | Local mechanical behavior mapping of a biopolymer blend using nanoindentation, finite element computation, and simplex optimization strategy. <i>Journal of Applied Polymer Science</i> , 2017, 134, . | 1.3 | 3 |
| 51 | A MAC based excitation frequency increasing method for structural topology optimization under harmonic excitations. <i>International Journal for Simulation and Multidisciplinary Design Optimization</i> , 2017, 8, A4. | 0.6 | 4 |
| 52 | Stiffeners layout design of thin-walled structures with constraints on multi-fastener joint loads. <i>Chinese Journal of Aeronautics</i> , 2017, 30, 1441-1450. | 2.8 | 12 |
| 53 | Integrated layout and topology optimization design of multi-frame and multi-component fuselage structure systems. <i>Structural and Multidisciplinary Optimization</i> , 2017, 56, 21-45. | 1.7 | 26 |
| 54 | A comprehensive study of feature definitions with solids and voids for topology optimization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 325, 289-313. | 3.4 | 63 |

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|----|---|-----|-----------|
| 55 | On the Topology Optimization of Elastic Supporting Structures under Thermomechanical Loads. <i>International Journal of Aerospace Engineering</i> , 2016, 2016, 1-12. | 0.5 | 13 |
| 56 | Feature-driven topology optimization method with signed distance function. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2016, 310, 1-32. | 3.4 | 115 |
| 57 | A moving bounds strategy for the parameterization of geometric design variables in the simultaneous shape optimization of curved shell structures and openings. <i>Finite Elements in Analysis and Design</i> , 2016, 120, 80-91. | 1.7 | 6 |
| 58 | Backbone cup “a structure design competition based on topology optimization and 3D printing. <i>International Journal for Simulation and Multidisciplinary Design Optimization</i> , 2016, 7, A1. | 0.6 | 10 |
| 59 | Shape optimization of axisymmetric solids with the finite cell method using a fixed grid. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2016, 32, 510-524. | 1.5 | 13 |
| 60 | Shape preserving design with structural topology optimization. <i>Structural and Multidisciplinary Optimization</i> , 2016, 53, 893-906. | 1.7 | 31 |
| 61 | Topology Optimization in Aircraft and Aerospace Structures Design. <i>Archives of Computational Methods in Engineering</i> , 2016, 23, 595-622. | 6.0 | 564 |
| 62 | Shape and Topology Optimization for Complicated Engineering Structures. <i>Mathematical Problems in Engineering</i> , 2015, 2015, 1-2. | 0.6 | 3 |
| 63 | An improved adaptive constraint aggregation for integrated layout and topology optimization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 289, 387-408. | 3.4 | 34 |
| 64 | A Multi-point constraints based integrated layout and topology optimization design of multi-component systems. <i>Structural and Multidisciplinary Optimization</i> , 2015, 51, 397-407. | 1.7 | 33 |
| 65 | Structural optimization in ESAC: annals 2011. <i>International Journal for Simulation and Multidisciplinary Design Optimization</i> , 2014, 5, A09. | 0.6 | 0 |
| 66 | A multi-point constraints based layout design of multi-component systems. <i>International Journal for Simulation and Multidisciplinary Design Optimization</i> , 2014, 5, A08. | 0.6 | 0 |
| 67 | Topology Optimization Design of Spacecraft Antenna Pedestal Structure under Random Excitations. <i>Applied Mechanics and Materials</i> , 2014, 711, 542-545. | 0.2 | 0 |
| 68 | Structural topology optimization with constraints on multi-fastener joint loads. <i>Structural and Multidisciplinary Optimization</i> , 2014, 50, 561-571. | 1.7 | 14 |
| 69 | A biarc-based shape optimization approach to reduce stress concentration effects. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2014, 30, 370-382. | 1.5 | 9 |
| 70 | Stress constrained shape and topology optimization with fixed mesh: A B-spline finite cell method combined with level set function. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 278, 361-387. | 3.4 | 88 |
| 71 | Structural topology optimization: Extensibility and attainability. <i>Science China Technological Sciences</i> , 2014, 57, 1310-1321. | 2.0 | 10 |
| 72 | Structural design of aircraft skin stretch-forming die using topology optimization. <i>Journal of Computational and Applied Mathematics</i> , 2013, 246, 278-288. | 1.1 | 48 |

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| 73 | An implicit model for the integrated optimization of component layout and structure topology. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013, 257, 87-102. | 3.4 | 60 |
| 74 | The lattice structure configuration design for stereolithography investment casting pattern using topology optimization. <i>Rapid Prototyping Journal</i> , 2012, 18, 353-361. | 1.6 | 23 |
| 75 | Optimal Packing Configuration Design with Finite-Circle Method. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2012, 67, 185-199. | 2.0 | 18 |
| 76 | Layout optimization of multi-component structures under static loads and random excitations. <i>Engineering Structures</i> , 2012, 43, 120-128. | 2.6 | 41 |
| 77 | Sensitivity analysis with the modified Heaviside function for the optimal layout design of multi-component systems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012, 241-244, 142-154. | 3.4 | 32 |
| 78 | Integrated layout design of multi-component systems using XFEM and analytical sensitivity analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012, 245-246, 75-89. | 3.4 | 58 |
| 79 | A superelement formulation for the efficient layout design of complex multi-component system. <i>Structural and Multidisciplinary Optimization</i> , 2012, 45, 643-655. | 1.7 | 26 |
| 80 | Some Recent Advances in the Integrated Layout Design of Multicomponent Systems. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2011, 133, . | 1.7 | 48 |
| 81 | An extended stress-based method for orientation angle optimization of laminated composite structures. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2011, 27, 977-985. | 1.5 | 13 |
| 82 | Buckling Optimization of Perforated Curved Shells. <i>Materials Science Forum</i> , 2011, 697-698, 614-617. | 0.3 | 1 |
| 83 | A modeling module for stereolithography based investment casting resin model. , 2011, , . | | 1 |
| 84 | Shape optimization of 3D curved slots and its application to the squirrel-cage elastic support design. <i>Science China: Physics, Mechanics and Astronomy</i> , 2010, 53, 1895-1900. | 2.0 | 12 |
| 85 | Integrated layout design of supports and structures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010, 199, 557-569. | 3.4 | 70 |
| 86 | On the multi-component layout design with inertial force. <i>Journal of Computational and Applied Mathematics</i> , 2010, 234, 2222-2230. | 1.1 | 47 |
| 87 | On the Topology Optimization Design for the Stereolithography Based Investment Casting Model. <i>Advanced Materials Research</i> , 2010, 139-141, 1464-1467. | 0.3 | 4 |
| 88 | Integrated layout design of multi-component system. <i>International Journal for Numerical Methods in Engineering</i> , 2009, 78, 631-651. | 1.5 | 117 |
| 89 | Multidisciplinary Optimization of Airborne Radome Using Genetic Algorithm. <i>Lecture Notes in Computer Science</i> , 2009, , 150-158. | 1.0 | 2 |
| 90 | Simultaneous design of components layout and supporting structures using coupled shape and topology optimization technique. <i>Structural and Multidisciplinary Optimization</i> , 2008, 36, 29-41. | 1.7 | 77 |

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|----|--|-----|-----------|
| 91 | Topology optimization of heat conduction problem involving design-dependent heat load effect. Finite Elements in Analysis and Design, 2008, 44, 805-813. | 1.7 | 112 |
| 92 | Bi-Directional Evolutionary Topology Optimization Using Element Replaceable Method. Computational Mechanics, 2007, 40, 97-109. | 2.2 | 56 |
| 93 | Maximization of structural natural frequency with optimal support layout. Structural and Multidisciplinary Optimization, 2006, 31, 462-469. | 1.7 | 45 |
| 94 | Topological Design of Three-Dimensional Microstructure Based on Homogenization Effective Method. Materials Science Forum, 2006, 532-533, 705-708. | 0.3 | 0 |
| 95 | Optimal Design of Aero-Engine Stator Structure with Combined Shape and Topology Optimization Method. Materials Science Forum, 0, 697-698, 623-626. | 0.3 | 1 |
| 96 | Integrated Optimal Design of Complex Multi-Component System in Three-Dimension. Materials Science Forum, 0, 697-698, 608-613. | 0.3 | 0 |
| 97 | Aircraft Skin Stretch-Forming Die Light-Weight Design Using Topology Optimization. Materials Science Forum, 0, 697-698, 600-603. | 0.3 | 1 |
| 98 | The Topology Optimization Design for the Stereolithography Based Investment Casting Pattern. Materials Science Forum, 0, 697-698, 604-607. | 0.3 | 0 |