Mingdong Zhou

List of Publications by Year
in descending order

29 papers	1,012 citations	471371 17 h-index	526166 27 g-index
29 all docs	29 docs citations	29 times ranked	762 citing authors

#	Article	IF	Citations
1	Minimum length scale in topology optimization by geometric constraints. Computer Methods in Applied Mechanics and Engineering, 2015, 293, 266-282.	3.4	275
2	A "poor man's approach" to topology optimization of cooling channels based on a Darcy flow model. International Journal of Heat and Mass Transfer, 2018, 116, 1108-1123.	2.5	89
3	Industrial application of topology optimization for combined conductive and convective heat transfer problems. Structural and Multidisciplinary Optimization, 2016, 54, 1045-1060.	1.7	83
4	Topology optimization of thermal conductive support structures for laser additive manufacturing. Computer Methods in Applied Mechanics and Engineering, 2019, 353, 24-43.	3.4	69
5	Reliability based topology optimization for continuum structures with local failure constraints. Computers and Structures, 2014, 143, 73-84.	2.4	47
6	VCUT level set method for topology optimization of functionally graded cellular structures. Computer Methods in Applied Mechanics and Engineering, 2019, 354, 487-505.	3.4	43
7	Engineering feature design for level set based structural optimization. CAD Computer Aided Design, 2013, 45, 1524-1537.	1.4	41
8	Topology optimization for optical projection lithography with manufacturing uncertainties. Applied Optics, 2014, 53, 2720.	0.9	34
9	On fully stressed design and p-norm measures in structural optimization. Structural and Multidisciplinary Optimization, 2017, 56, 731-736.	1.7	31
10	Cellular level set in B-splines (CLIBS): A method for modeling and topology optimization of cellular structures. Computer Methods in Applied Mechanics and Engineering, 2019, 349, 378-404.	3.4	29
11	Shape morphing and topology optimization of fluid channels by explicit boundary tracking. International Journal for Numerical Methods in Fluids, 2018, 88, 296-313.	0.9	27
12	Topology optimization of easy-removal support structures for additive manufacturing. Structural and Multidisciplinary Optimization, 2020, 61, 2423-2435.	1.7	24
13	Shape-constrained flock animation. Computer Animation and Virtual Worlds, 2008, 19, 319-330.	0.7	22
14	Topology optimization of channel cooling structures considering thermomechanical behavior. Structural and Multidisciplinary Optimization, 2019, 59, 613-632.	1.7	22
15	Parametric structural optimization with dynamic knot RBFs and partition of unity method. Structural and Multidisciplinary Optimization, 2013, 47, 353-365.	1.7	19
16	Multi-scale and multi-material topology optimization of channel-cooling cellular structures for thermomechanical behaviors. Computer Methods in Applied Mechanics and Engineering, 2021, 383, 113896.	3.4	19
17	A semi-Lagrangian level set method for structural optimization. Structural and Multidisciplinary Optimization, 2012, 46, 487-501.	1.7	18
18	Optimal topology design of steel–concrete composite structures under stiffness and strength constraints. Computers and Structures, 2012, 112-113, 433-444.	2.4	17

#	Article	IF	Citations
19	Topology optimization of self-supporting infill structures. Structural and Multidisciplinary Optimization, 2021, 63, 2289-2304.	1.7	17
20	Topology optimization of reinforced concrete structures considering control of shrinkage and strength failure. Computers and Structures, 2015, 157, 31-41.	2.4	16
21	Lightweight Splint Design for Individualized Treatment of Distal Radius Fracture. Journal of Medical Systems, 2019, 43, 284.	2.2	13
22	Concurrent topology optimization of shells with self-supporting infills for additive manufacturing. Computer Methods in Applied Mechanics and Engineering, 2022, 390, 114430.	3.4	11
23	Simultaneous parameter and tolerance optimization of structures via probability-interval mixed reliability model. Structural and Multidisciplinary Optimization, 2015, 51, 705-719.	1.7	9
24	Topology optimization for optical microlithography with partially coherent illumination. International Journal for Numerical Methods in Engineering, 2017, 109, 631-647.	1.5	9
25	Stress-based shape and topology optimization with cellular level set in B-splines. Structural and Multidisciplinary Optimization, 2020, 62, 2391-2407.	1.7	9
26	Elastically-isotropic open-cell minimal surface shell lattices with superior stiffness via variable thickness design. Additive Manufacturing, 2021, 47, 102293.	1.7	9
27	Engineered Model Simplification for Simulation Based Structural Design. Computer-Aided Design and Applications, 2012, 9, 87-94.	0.4	8
28	New analysis model for rotor-bearing systems based on plate theory. Frontiers of Mechanical Engineering, 2019, 14, 461-473.	2.5	1
29	Structural Optimization Using Adaptive Level Set Method. , 2012, , .		1