Wenjie Zuo

List of Publications by Citations

44 papers	871 citations	17 h-index	29 g-index
47 ext. papers	1,037 ext. citations	2.4 avg, IF	5.24 L-index

#	Paper	IF	Citations
44	Multi-material topology optimization using ordered SIMP interpolation. *Structural and Multidisciplinary Optimization*, **2017**, 55, 477-491	3.6	203
43	Fast structural optimization with frequency constraints by genetic algorithm using adaptive eigenvalue reanalysis methods. *Structural and Multidisciplinary Optimization*, **2011**, 43, 799-810	3.6	65
42	A hybrid OC□A approach for fast and global truss optimization with frequency constraints. *Applied Soft Computing Journal*, **2014**, 14, 528-535	7.5	48
41	Simplified crashworthiness method of automotive frame for conceptual design. *Thin-Walled Structures*, **2018**, 131, 324-335	4.7	44
40	An adaptive reanalysis method for genetic algorithm with application to fast truss optimization. *Acta Mechanica Sinica/Lixue Xuebao*, **2010**, 26, 225-234	2	42
39	Hollow structural design in topology optimization via moving morphable component method. *Structural and Multidisciplinary Optimization*, **2020**, 61, 187-205	3.6	38
38	Bi-level optimization for the cross-sectional shape of a thin-walled car body frame with static stiffness and dynamic frequency stiffness constraints. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2015**, 229, 1046-1059	1.4	37
37	Cross-sectional shape optimisation for thin-walled beam crashworthiness with stamping constraints using genetic algorithm. *International Journal of Vehicle Design*, **2017**, 73, 76	2.4	36
36	Component sensitivity analysis of conceptual vehicle body for lightweight design under static and dynamic stiffness demands. *International Journal of Vehicle Design*, **2014**, 66, 107	2.4	36
35	A complete development process of finite element software for body-in-white structure with semi-rigid beams in .NET framework. *Advances in Engineering Software*, **2012**, 45, 261-271	3.6	34
34	An object-oriented graphics interface design and optimization software for cross-sectional shape of automobile body. *Advances in Engineering Software*, **2013**, 64, 1-10	3.6	34
33	Sensitivity reanalysis of static displacement using Taylor series expansion and combined approximate method. *Structural and Multidisciplinary Optimization*, **2016**, 53, 953-959	3.6	26
32	A hybrid Fox and Kirsch□ reduced basis method for structural static reanalysis. *Structural and Multidisciplinary Optimization*, **2012**, 46, 261-272	3.6	24
31	Bending collapse of dual rectangle thin-walled tubes for conceptual design. *Thin-Walled Structures*, **2019**, 135, 185-195	4.7	23
30	Stress sensitivity analysis and optimization of automobile body frame consisting of rectangular tubes. *International Journal of Automotive Technology*, **2016**, 17, 843-851	1.6	21
29	Cross-sectional shape design and optimization of automotive body with stamping constraints. *International Journal of Automotive Technology*, **2016**, 17, 1003-1011	1.6	20
28	New Adaptive Technique of Kirsch Method for Structural Reanalysis. *AIAA Journal*, **2014**, 52, 486-495	2.1	17

27	Sensitivity reanalysis of vibration problem using combined approximations method. *Structural and Multidisciplinary Optimization*, **2017**, 55, 1399-1405	3.6	17
26	Lightweight design of bus frames from multi-material topology optimization to cross-sectional size optimization. *Engineering Optimization*, **2019**, 51, 961-977	2	17
25	Rollover crashworthiness analysis and optimization of bus frame for conceptual design. *Journal of Mechanical Science and Technology*, **2019**, 33, 3363-3373	1.6	16
24	Cross-sectional shape design of automobile structure considering rigidity and driver's field of view. *Advances in Engineering Software*, **2018**, 115, 161-167	3.6	11
23	Shape Optimization of Thin-Walled Cross Section for Automobile Body Considering Stamping Cost, Manufacturability and Structural Stiffness. *International Journal of Automotive Technology*, **2020**, 21, 503-512	1.6	9
22	Equivalent static displacements method for contact force optimization. *Structural and Multidisciplinary Optimization*, **2020**, 62, 323-336	3.6	8
21	Variable Cross-Section Rectangular Beam and Sensitivity Analysis for Lightweight Design of Bus Frame. *International Journal of Automotive Technology*, **2018**, 19, 1033-1040	1.6	8
20	Bridging Topological Results and Thin-Walled Frame Structures Considering Manufacturability. *Journal of Mechanical Design, Transactions of the ASME*, **2021**, 143,	3	7
19	EFESTS: Educational finite element software for truss structure. Part I: Preprocess. *International Journal of Mechanical Engineering Education*, **2014**, 42, 298-306	0.6	5
18	EFESTS: Educational finite element software for truss structure. Part II: Linear static analysis. *International Journal of Mechanical Engineering Education*, **2014**, 42, 307-319	0.6	4
17	Static Response Analysis of Uncertain Structures With Large-Scale Unknown-But-Bounded Parameters. *International Journal of Applied Mechanics*, **2021**, 13, 2150004	2.4	4
16	Comparison of gradient and nongradient algorithms in the structural optimization course. *International Journal of Mechanical Engineering Education*, **2019**, 47, 275-290	0.6	3
15	EFESTS: Educational finite element software for truss structure Part 3: Geometrically nonlinear static analysis. *International Journal of Mechanical Engineering Education*, **2017**, 45, 154-169	0.6	2
14	Equivalent substitution criteria of aluminum for steel and its application in automobile structures. *Advances in Mechanical Engineering*, **2020**, 12, 168781402091122	1.2	2
13	Reanalysis Method for Second Derivatives of Static Displacement. *International Journal of Computational Methods*, **2020**, 17, 1950056	1.1	2
12	Analytical Sensitivity Analysis Method of Cross-Sectional Shape for Thin-Walled Automobile Frame Considering Global Performances. *International Journal of Automotive Technology*, **2020**, 21, 1207-1216	1.6	2
11	Hollow structural topology optimization to improve manufacturability using three-dimensional moving morphable bars. *Advances in Engineering Software*, **2021**, 152, 102955	3.6	2
10	Bounds for uncertain structural problems with large-range interval parameters. *Archive of Applied Mechanics*, **2021**, 91, 1157-1177	2.2	2

9	Bending collapse of treble rectangular thin-walled tubes and its application in conceptual design for automobile crashworthiness. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2021**, 235, 1269-1284	1.4	1
8	Topology optimization of thin-walled cross section using moving morphable components approach. *Structural and Multidisciplinary Optimization*, **2021**, 63, 2159-2176	3.6	1
7	Nonlinear dynamic topology optimization with explicit and smooth geometric outline via moving morphable components method. *Structural and Multidisciplinary Optimization*, **2021**, 64, 2465	3.6	0
6	Slope hybrid reliability analysis considering the uncertainty of probability-interval using three-parameter Weibull distribution. *Natural Hazards*, **2021**, 105, 565-586	3	0
5	Lightweight and maintainable rotary-wing UAV frame from configurable design to detailed design. *Advances in Mechanical Engineering*, **2021**, 13, 168781402110349	1.2	0
4	Lightweight Design of CFRP-Laminated Structures by Combining Microscopical Homogenization and Macroscopical Optimization. *International Journal of Automotive Technology*, **2021**, 22, 1427-1436	1.6	0
3	Multi-objective optimization of automobile body frame considering weight, rigidity, and frequency for conceptual design. *Advances in Mechanical Engineering*, **2022**, 14, 168781322210784	1.2	0
2	Dynamic abuse testing of airbag system for passenger car under vehicle-road conditions and identification method for high-risk triggering items. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*,095440702110375	1.4	
1	Structural Dynamic Modification Based on Combined Approximations Method. *E3S Web of Conferences*, **2021**, 252, 03032	0.5	