

# Bin Xu

## List of Publications by Year in descending order

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43  
papers

568  
citations

623734

14  
h-index

713466

21  
g-index

43  
all docs

43  
docs citations

43  
times ranked

280  
citing authors

#	ARTICLE	IF	CITATIONS
1	Concurrent design of composite macrostructure and multi-phase material microstructure for minimum dynamic compliance. <i>Composite Structures</i> , 2015, 128, 221-233.	5.8	52
2	Concurrent design of composite macrostructure and cellular microstructure under random excitations. <i>Composite Structures</i> , 2015, 123, 65-77.	5.8	44
3	Bi-directional evolutionary topology optimization of geometrically nonlinear continuum structures with stress constraints. <i>Applied Mathematical Modelling</i> , 2020, 80, 771-791.	4.2	44
4	Topology optimization of continuum structures under hybrid additive-subtractive manufacturing constraints. <i>Structural and Multidisciplinary Optimization</i> , 2019, 60, 2571-2595.	3.5	31
5	Topology optimization of continuum structures for natural frequencies considering casting constraints. <i>Engineering Optimization</i> , 2019, 51, 941-960.	2.6	25
6	An efficient 137-line MATLAB code for geometrically nonlinear topology optimization using bi-directional evolutionary structural optimization method. <i>Structural and Multidisciplinary Optimization</i> , 2021, 63, 2571-2588.	3.5	22
7	Structural topological optimization with dynamic fatigue constraints subject to dynamic random loads. <i>Engineering Structures</i> , 2020, 205, 110089.	5.3	18
8	Optimal design of material microstructure for maximizing damping dissipation velocity of piezoelectric composite beam. <i>International Journal of Mechanical Sciences</i> , 2017, 128-129, 527-540.	6.7	17
9	Numerical performance of Poisson method for restricting enclosed voids in topology optimization. <i>Computers and Structures</i> , 2020, 239, 106337.	4.4	17
10	Topology optimization of material nonlinear continuum structures under stress constraints. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 378, 113731.	6.6	17
11	Bi-directional evolutionary topology optimization of continuum structures subjected to inertial loads. <i>Advances in Engineering Software</i> , 2021, 155, 102897.	3.8	17
12	A novel discrete-continuous material orientation optimization model for stiffness-based concurrent design of fiber composite. <i>Composite Structures</i> , 2021, 273, 114288.	5.8	17
13	Stress-based multi-material structural topology optimization considering graded interfaces. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022, 391, 114602.	6.6	17
14	Dynamic response reliability based topological optimization of continuum structures involving multi-phase materials. <i>Composite Structures</i> , 2016, 149, 134-144.	5.8	16
15	Stress constrained thermo-elastic topology optimization based on stabilizing control schemes. <i>Journal of Thermal Stresses</i> , 2020, 43, 1040-1068.	2.0	16
16	Continuum structural topological optimization with dynamic stress response constraints. <i>Advances in Engineering Software</i> , 2020, 148, 102834.	3.8	16
17	Topological optimization of continuum structures for additive manufacturing considering thin feature and support structure constraints. <i>Engineering Optimization</i> , 2021, 53, 2122-2143.	2.6	15
18	Topology optimization of continuum structures with uncertain-but-bounded parameters for maximum non-probabilistic reliability of frequency requirement. <i>JVC/Journal of Vibration and Control</i> , 2017, 23, 2557-2566.	2.6	12

#	ARTICLE	IF	CITATIONS
19	Thermo-elastic topology optimization with stress and temperature constraints. International Journal for Numerical Methods in Engineering, 2021, 122, 2919-2944.	2.8	12
20	Topology optimization of cast parts considering parting surface position. Advances in Engineering Software, 2020, 149, 102886.	3.8	11
21	Bi-directional evolutionary stress-based topology optimization of material nonlinear structures. Structural and Multidisciplinary Optimization, 2021, 63, 1287-1305.	3.5	11
22	Electro-thermal-mechanical modeling of quench and stress evolution triggered by various factors in high-temperature superconducting coils. Journal of Applied Physics, 2021, 129, .	2.5	11
23	Research on the Blow-Off Impulse Effect of a Composite Reinforced Panel Subjected to Lightning Strike. Applied Sciences (Switzerland), 2019, 9, 1168.	2.5	10
24	Topology optimization of dynamic stress response reliability of continuum structures involving multi-phase materials. Structural and Multidisciplinary Optimization, 2019, 59, 851-876.	3.5	9
25	Structural topology optimization considering both performance and manufacturability: strength, stiffness, and connectivity. Structural and Multidisciplinary Optimization, 2021, 63, 1427-1453.	3.5	9
26	Stress-based bi-directional evolutionary structural topology optimization considering nonlinear continuum damage. Computer Methods in Applied Mechanics and Engineering, 2022, 396, 115086.	6.6	9
27	Integrated optimization of structural topology and control for piezoelectric smart trusses with interval variables. JVC/Journal of Vibration and Control, 2014, 20, 576-588.	2.6	8
28	A multi-scale discrete material optimization model for optimization of structural topology and material orientations to minimize dynamic compliance. Structural and Multidisciplinary Optimization, 2021, 64, 1343-1365.	3.5	8
29	Optimal design of vibrating composite plate considering discrete-continuous parameterization model and resonant peak constraint. International Journal of Mechanics and Materials in Design, 2021, 17, 679-705.	3.0	7
30	Concurrent design of composite macrostructure and cellular microstructure with respect to dynamic stress response under random excitations. Composite Structures, 2021, 257, 113123.	5.8	6
31	Topology optimization of thermo-elastic structures considering stiffness, strength, and temperature constraints over a wide range of temperatures. International Journal for Numerical Methods in Engineering, 2022, 123, 1627-1653.	2.8	6
32	Stress-based topology optimization of continuum structures for the elastic contact problems with friction. Structural and Multidisciplinary Optimization, 2022, 65, 54.	3.5	6
33	Material microstructure topology optimization of piezoelectric composite beam under initial disturbance for vibration suppression. JVC/Journal of Vibration and Control, 2022, 28, 1364-1378.	2.6	5
34	A new method for concurrent multi-scale design optimization of fiber-reinforced composite frames with fundamental frequency constraints. Structural and Multidisciplinary Optimization, 2021, 64, 3773-3795.	3.5	5
35	Numerical study on the impact response of aircraft fuselage structures subjected to large-size tire fragment. Science Progress, 2020, 103, 003685041987774.	1.9	4
36	Lightweight topology optimization of thermal structures under compliance, stress and temperature constraints. Journal of Thermal Stresses, 2021, 44, 1121-1149.	2.0	4

#	ARTICLE	IF	CITATIONS
37	Concurrent design of the free damping structure for minimizing the frequency response in a broad frequency band. <i>Engineering Optimization</i> , 2022, 54, 1273-1288.	2.6	3
38	Controlling the maximum stress in structural stiffness topology optimization of geometrical and material nonlinear structures. <i>Structural and Multidisciplinary Optimization</i> , 2021, 64, 3971-3998.	3.5	3
39	Study on vibration of dragon wash basin and free surface waves inside. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2019, 35, 15-23.	3.4	2
40	Stress-related topology optimization for castable design. <i>International Journal for Numerical Methods in Engineering</i> , 2021, 122, 6203.	2.8	2
41	A cascadic multilevel optimization framework for the concurrent design of the fiber-reinforced composite structure through the NURBS surface. <i>Engineering With Computers</i> , 2023, 39, 2735-2756.	6.1	2
42	Size-dependent two-scale topological design for maximizing structural fundamental eigenfrequency. <i>JVC/Journal of Vibration and Control</i> , 2021, 27, 2600-2615.	2.6	1
43	Optimal design of laminated plate for minimizing frequency response based on discrete material model and mode reduction method. <i>Engineering With Computers</i> , 2022, 38, 2919-2951.	6.1	1