List of Publications by Year in descending order

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ΖΗΛΝ ΚΛΝΟ

#	Article	IF	CITATIONS
1	A velocity field level set method for topology optimization of piezoelectric layer on the plate with active vibration control. Mechanics of Advanced Materials and Structures, 2023, 30, 1326-1339.	1.5	6
2	A Super‧tretchable and Highly Sensitive Carbon Nanotube Capacitive Strain Sensor for Wearable Applications and Soft Robotics. Advanced Materials Technologies, 2022, 7, 2100769.	3.0	36
3	Velocity Field Level Set Method Incorporating Topological Derivatives for Topology Optimization. Journal of Applied Mechanics, Transactions ASME, 2022, 89, .	1.1	2
4	A new form of forbidden frequency band constraint for dynamic topology optimization. Structural and Multidisciplinary Optimization, 2022, 65, 1.	1.7	5
5	Stiffness modulation-driven transfer printing and strain isolation in stretchable electronics. Materials and Design, 2022, 217, 110602.	3.3	6
6	Nonlinear analysis of carbon nanotube reinforced functionally graded plates with magneto-electro-elastic multiphase matrix. Composite Structures, 2022, 297, 115969.	3.1	17
7	Tailoring the thermal and mechanical properties of injectionâ€molded poly (lactic acid) parts through annealing. Journal of Applied Polymer Science, 2021, 138, 49648.	1.3	14
8	Topology optimization for minimum stress design with embedded movable holes. Computers and Structures, 2021, 244, 106455.	2.4	8
9	Realization of full and directional band gap design by non-gradient topology optimization in acoustic metamaterials. Extreme Mechanics Letters, 2021, 42, 101126.	2.0	55
10	Non-uniform self-folding of impure graphene. International Journal of Mechanical Sciences, 2021, 193, 106158.	3.6	6
11	Topological design of microstructures using periodic material-field series-expansion and gradient-free optimization algorithm. Materials and Design, 2021, 199, 109437.	3.3	26
12	Integrated design optimization of structural topology and heat source layout. International Journal of Heat and Mass Transfer, 2021, 169, 120943.	2.5	12
13	Photonic Band Gap Material Topological Design at Specified Target Frequency. Advanced Theory and Simulations, 2021, 4, 2100125.	1.3	8
14	Design of multi-material soft pneumatic modules. Smart Materials and Structures, 2021, 30, 095006.	1.8	7
15	Multi-electrode layout design of electrorheological composite plates considering energy consumption in semi-active control. Thin-Walled Structures, 2021, 165, 108001.	2.7	2
16	Robust topology optimization for structures under bounded random loads and material uncertainties. Computers and Structures, 2021, 252, 106569.	2.4	24
17	MATLAB implementations of velocity field level set method for topology optimization: an 80-line code for 2D and a 100-line code for 3D problems. Structural and Multidisciplinary Optimization, 2021, 64, 4325-4342.	1.7	14
18	Wrinkled and wrinkle-free membranes. International Journal of Engineering Science, 2021, 167, 103526.	2.7	13

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19	A novel mechanical metamaterial with simultaneous stretching- and compression-expanding property. Materials and Design, 2021, 208, 109930.	3.3	28
20	A Precisely ontrolled Multichannel Phononic Crystal Resonant Cavity. Advanced Theory and Simulations, 2021, 4, 2100250.	1.3	6
21	Compression-driven collapse of nanotubes. Nanotechnology, 2020, 31, 025603.	1.3	1
22	Layout optimization of continuum structures embedded with movable components and holes simultaneously. Structural and Multidisciplinary Optimization, 2020, 61, 555-573.	1.7	14
23	Chamber layout design optimization of soft pneumatic robots. Smart Materials and Structures, 2020, 29, 025017.	1.8	12
24	Isotropic "Quasiâ€Fluid―Metamaterials Designed by Topology Optimization. Advanced Theory and Simulations, 2020, 3, 1900182.	1.3	16
25	Topology optimization method for the design of bioinspired self-similar hierarchical microstructures. Computer Methods in Applied Mechanics and Engineering, 2020, 372, 113399.	3.4	22
26	Mechanics of folding of nanorings. Mechanics of Materials, 2020, 148, 103493.	1.7	1
27	Topology optimization using material-field series expansion and Kriging-based algorithm: An effective non-gradient method. Computer Methods in Applied Mechanics and Engineering, 2020, 364, 112966.	3.4	63
28	Two-scale concurrent topology optimization of lattice structures with connectable microstructures. Additive Manufacturing, 2020, 36, 101427.	1.7	34
29	Multi-material structural topology optimization considering material interfacial stress constraints. Computer Methods in Applied Mechanics and Engineering, 2020, 363, 112887.	3.4	29
30	Non-uniform global-buckling and local-folding in thin film of stretchable electronics. International Journal of Mechanical Sciences, 2020, 175, 105537.	3.6	13
31	A method using successive iteration of analysis and design for large-scale topology optimization considering eigenfrequencies. Computer Methods in Applied Mechanics and Engineering, 2020, 362, 112847.	3.4	30
32	Uncertainty of membrane wrinkling behaviors considering initial thickness imperfections. International Journal of Solids and Structures, 2020, 191-192, 264-277.	1.3	19
33	A general assessment index for non-probabilistic reliability of structures with bounded field and parametric uncertainties. Computer Methods in Applied Mechanics and Engineering, 2020, 366, 113046.	3.4	16
34	Velocity field levelâ€set method for topological shape optimization using freely distributed design variables. International Journal for Numerical Methods in Engineering, 2019, 120, 1411-1427.	1.5	10
35	Bi-material Topology Optimization Using Analysis Mesh-Independent Point-Wise Density Interpolation. Acta Mechanica Solida Sinica, 2019, 32, 698-712.	1.0	0
36	Topological design of piezoelectric actuator layer for linear quadratic regulator control of thin-shell structures under transient excitation. Smart Materials and Structures, 2019, 28, 095029.	1.8	11

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37	Topology optimization for concurrent design of layer-wise graded lattice materials and structures. International Journal of Engineering Science, 2019, 138, 26-49.	2.7	55
38	Interfacial cylindrite of poly(lactic acid) induced by pulling a single glass fiber. European Polymer Journal, 2019, 114, 127-133.	2.6	4
39	Concurrent two-scale topological design of multiple unit cells and structure using combined velocity field level set and density model. Computer Methods in Applied Mechanics and Engineering, 2019, 347, 340-364.	3.4	48
40	Robust topology optimization of vibrating structures considering random diffuse regions via a phase-field method. Computer Methods in Applied Mechanics and Engineering, 2019, 344, 766-797.	3.4	21
41	Adhesion of Partially and Fully Collapsed Nanotubes. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	1.1	6
42	Non-probabilistic uncertainty quantification and response analysis of structures with a bounded field model. Computer Methods in Applied Mechanics and Engineering, 2019, 347, 663-678.	3.4	51
43	A phase-field based robust topology optimization method for phononic crystals design considering uncertain diffuse regions. Computational Materials Science, 2019, 160, 159-172.	1.4	26
44	A theoretical analysis on self-collapsing of nanotubes. International Journal of Solids and Structures, 2019, 160, 51-58.	1.3	9
45	Robust topology optimization of multi-material structures considering uncertain graded interface. Composite Structures, 2019, 208, 395-406.	3.1	34
46	Reliabilityâ€based topology optimization against geometric imperfections with random threshold model. International Journal for Numerical Methods in Engineering, 2018, 115, 99-116.	1.5	31
47	Bi-material microstructural design of chiral auxetic metamaterials using topology optimization. Composite Structures, 2018, 195, 232-248.	3.1	91
48	Layout design of piezoelectric patches in structural linear quadratic regulator optimal control using topology optimization. Journal of Intelligent Material Systems and Structures, 2018, 29, 2277-2294.	1.4	15
49	Mechanics of the scrolling and folding of graphene. Nanotechnology, 2018, 29, 245604.	1.3	11
50	Topology optimization of piezoelectric smart structures for minimum energy consumption under active control. Structural and Multidisciplinary Optimization, 2018, 58, 185-199.	1.7	27
51	Achieving directional propagation of elastic waves via topology optimization. Ultrasonics, 2018, 82, 1-10.	2.1	35
52	A level set method for shape and topology optimization of coated structures. Computer Methods in Applied Mechanics and Engineering, 2018, 329, 553-574.	3.4	64
53	Mechanics of the folding of a nanotube. Nanotechnology, 2018, 29, 475602.	1.3	4
54	Global shape optimization of fixtures to suppress wrinkles in large-displacement membrane structures. International Journal of Solids and Structures, 2018, 144-145, 301-312.	1.3	24

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55	Level set-based topology optimization with overhang constraint: Towards support-free additive manufacturing. Computer Methods in Applied Mechanics and Engineering, 2018, 339, 591-614.	3.4	90
56	A velocity field level set method for shape and topology optimization. International Journal for Numerical Methods in Engineering, 2018, 115, 1315-1336.	1.5	49
5 7	Core melt temperature effects on cylindritic structures of co-injection molded polypropylene parts. International Communications in Heat and Mass Transfer, 2018, 97, 56-63.	2.9	4
58	Integrated topology optimization of multi-component structures considering connecting interface behavior. Computer Methods in Applied Mechanics and Engineering, 2018, 341, 851-887.	3.4	32
59	Robust topology optimization of phononic crystals with random field uncertainty. International Journal for Numerical Methods in Engineering, 2018, 115, 1154-1173.	1.5	50
60	Current and future trends in topology optimization for additive manufacturing. Structural and Multidisciplinary Optimization, 2018, 57, 2457-2483.	1.7	533
61	Structural shape and topology optimization of cast parts using level set method. International Journal for Numerical Methods in Engineering, 2017, 111, 1252-1273.	1.5	50
62	A multi-material topology optimization approach for wrinkle-free design of cable-suspended membrane structures. Computational Mechanics, 2017, 59, 967-980.	2.2	21
63	Wrinkle-free design of thin membrane structures using stress-based topology optimization. Journal of the Mechanics and Physics of Solids, 2017, 102, 277-293.	2.3	61
64	A Prenecking Strategy Makes Stretched Membranes With Clamped Ends Wrinkle-Free. Journal of Applied Mechanics, Transactions ASME, 2017, 84, .	1.1	7
65	Topology optimization considering fracture mechanics behaviors at specified locations. Structural and Multidisciplinary Optimization, 2017, 55, 1847-1864.	1.7	43
66	Wrinkling and wrinkling-suppression in graphene membranes with frozen zone. Thin Solid Films, 2017, 638, 345-353.	0.8	11
67	Optimal topology design for stress-isolation of soft hyperelastic composite structures under imposed boundary displacements. Structural and Multidisciplinary Optimization, 2017, 55, 1747-1758.	1.7	4
68	Robust shape and topology optimization considering geometric uncertainties with stochastic level set perturbation. International Journal for Numerical Methods in Engineering, 2017, 110, 31-56.	1.5	59
69	Multi-material topology optimization considering interface behavior via XFEM and level set method. Computer Methods in Applied Mechanics and Engineering, 2016, 308, 113-133.	3.4	124
70	Structural topology optimization with minimum distance control of multiphase embedded components by level set method. Computer Methods in Applied Mechanics and Engineering, 2016, 306, 299-318.	3.4	38
71	Robust topology optimization for dynamic compliance minimization under uncertain harmonic excitations with inhomogeneous eigenvalue analysis. Structural and Multidisciplinary Optimization, 2016, 54, 1469-1484.	1.7	30
72	Construction and application of an ellipsoidal convex model using a semi-definite programming formulation from measured data. Computer Methods in Applied Mechanics and Engineering, 2016, 300, 461-489.	3.4	63

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73	Topology optimization of hyperelastic structures with frictionless contact supports. International Journal of Solids and Structures, 2016, 81, 373-382.	1.3	33
74	Vibration suppression using integrated topology optimization of host structures and damping layers. JVC/Journal of Vibration and Control, 2016, 22, 60-76.	1.5	20
75	Robust topology optimization for dynamic compliance minimization under uncertain harmonic excitations with inhomogeneous eigenvalue analysis. , 2016, 54, 1469.		1
76	Hydrogen adsorption and desorption with 3D silicon nanotube-network and film-network structures: Monte Carlo simulations. Journal of Applied Physics, 2015, 118, .	1.1	7
77	Topology optimization of geometrically nonlinear structures based on an additive hyperelasticity technique. Computer Methods in Applied Mechanics and Engineering, 2015, 286, 422-441.	3.4	87
78	Topology optimization of magnetorheological fluid layers in sandwich plates for semi-active vibration control. Smart Materials and Structures, 2015, 24, 085024.	1.8	14
79	A multi-material level set-based topology and shape optimization method. Computer Methods in Applied Mechanics and Engineering, 2015, 283, 1570-1586.	3.4	208
80	A COMPUTATIONAL TOOL FOR BAYESIAN NETWORKS ENHANCED WITH RELIABILITY METHODS. , 2015, , .		0
81	Topological design of compliant smart structures with embedded movable actuators. Smart Materials and Structures, 2014, 23, 045024.	1.8	59
82	Topological shape optimization of microstructural metamaterials using a level set method. Computational Materials Science, 2014, 87, 178-186.	1.4	151
83	Folding of multi-layer graphene sheets induced by van der Waals interaction. Acta Mechanica Sinica/Lixue Xuebao, 2014, 30, 410-417.	1.5	19
84	Dynamic topology optimization of piezoelectric structures with active control for reducing transient response. Computer Methods in Applied Mechanics and Engineering, 2014, 281, 200-219.	3.4	91
85	Topology optimization of electrode coverage of piezoelectric thin-walled structures with CGVF control for minimizing sound radiation. Structural and Multidisciplinary Optimization, 2014, 50, 799-814.	1.7	34
86	A topology optimization method for geometrically nonlinear structures with meshless analysis and independent density field interpolation. Computational Mechanics, 2014, 54, 629-644.	2.2	47
87	Topology optimization of piezoelectric layers in plates with active vibration control. Journal of Intelligent Material Systems and Structures, 2014, 25, 697-712.	1.4	41
88	Photonic approach to broadband instantaneous microwave frequency measurement with improved accuracy. Optics Communications, 2014, 328, 87-90.	1.0	16
89	Adaptive topology optimization with independent error control for separated displacement and density fields. Computers and Structures, 2014, 135, 50-61.	2.4	55
90	On robust design optimization of truss structures with bounded uncertainties. Structural and Multidisciplinary Optimization, 2013, 47, 699-714.	1.7	43

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91	An adaptive method for high-resolution topology design. Acta Mechanica Sinica/Lixue Xuebao, 2013, 29, 840-850.	1.5	13
92	Mechanics of self-folding of single-layer graphene. Journal Physics D: Applied Physics, 2013, 46, 055308.	1.3	68
93	Layout design of reinforced concrete structures using two-material topology optimization with Drucker–Prager yield constraints. Structural and Multidisciplinary Optimization, 2013, 47, 95-110.	1.7	43
94	An adaptive refinement approach for topology optimization based on separated density field description. Computers and Structures, 2013, 117, 10-22.	2.4	71
95	A molecular dynamics study on tensile strength and failure modes of carbon nanotube junctions. Journal Physics D: Applied Physics, 2013, 46, 495301.	1.3	13
96	Topology optimization of damping layers for minimizing sound radiation of shell structures. Journal of Sound and Vibration, 2013, 332, 2500-2519.	2.1	64
97	Integrated topology optimization with embedded movable holes based on combined description by material density and level sets. Computer Methods in Applied Mechanics and Engineering, 2013, 255, 1-13.	3.4	71
98	Multifunctional Epidermal Electronics Printed Directly Onto the Skin. Advanced Materials, 2013, 25, 2773-2778.	11.1	714
99	An enhanced aggregation method for topology optimization with local stress constraints. Computer Methods in Applied Mechanics and Engineering, 2013, 254, 31-41.	3.4	116
100	Multi-Functional Electronics: Multifunctional Epidermal Electronics Printed Directly Onto the Skin (Adv. Mater. 20/2013). Advanced Materials, 2013, 25, 2772-2772.	11.1	16
101	Molecular dynamics study on buckling of single-wall carbon nanotube-based intramolecular junctions and influence factors. Computational Materials Science, 2013, 67, 390-396.	1.4	24
102	Design of two-dimensional horseshoe layout for stretchable electronic systems. Journal of Materials Science, 2013, 48, 8443-8448.	1.7	17
103	A Viscoelastic Model for the Rate Effect in Transfer Printing. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	1.1	34
104	Mechanics of Epidermal Electronics. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	1.1	161
105	Sensitivity analysis of viscoplastic deformation process with application to metal preform design optimization. Engineering Optimization, 2012, 44, 1511-1523.	1.5	3
106	Topology Optimization for Static Shape Control of Piezoelectric Plates With Penalization on Intermediate Actuation Voltage. Journal of Mechanical Design, Transactions of the ASME, 2012, 134, .	1.7	22
107	An iterative algorithm for analysis of coupled structural-acoustic systems subject to random excitations. Acta Mechanica Sinica/Lixue Xuebao, 2012, 28, 458-467.	1.5	13
108	Thin, Flexible Sensors and Actuators as †Instrumented' Surgical Sutures for Targeted Wound Monitoring and Therapy. Small, 2012, 8, 3263-3268.	5.2	141

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109	Maximal Stiffness Design of Two-Material Structures by Topology Optimization with Nonprobabilistic Reliability. AIAA Journal, 2012, 50, 1993-2003.	1.5	25
110	A numerical study on nonlinear vibration of an inclined cable coupled with the deck in cable-stayed bridges. JVC/Journal of Vibration and Control, 2012, 18, 404-416.	1.5	16
111	A nodal variable method of structural topology optimization based on Shepard interpolant. International Journal for Numerical Methods in Engineering, 2012, 90, 329-342.	1.5	55
112	On topology optimization of damping layer in shell structures under harmonic excitations. Structural and Multidisciplinary Optimization, 2012, 46, 51-67.	1.7	125
113	Topology optimization of continuum structures with Drucker–Prager yield stress constraints. Computers and Structures, 2012, 90-91, 65-75.	2.4	107
114	Parametric study of bonded steel–concrete composite beams by using finite element analysis. Engineering Structures, 2012, 34, 40-51.	2.6	57
115	Structural topology optimization based on non-local Shepard interpolation of density field. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 3515-3525.	3.4	125
116	Reliability-based design optimization of adhesive bonded steel–concrete composite beams with probabilistic and non-probabilistic uncertainties. Engineering Structures, 2011, 33, 2110-2119.	2.6	74
117	Combined optimization of bi-material structural layout and voltage distribution for in-plane piezoelectric actuation. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1467-1478.	3.4	42
118	On non-probabilistic reliability-based design optimization of structures with uncertain-but-bounded parameters. Structural Safety, 2011, 33, 196-205.	2.8	122
119	An analytical model of strain isolation for stretchable and flexible electronics. Applied Physics Letters, 2011, 98, .	1.5	45
120	Microscale, printed LEDs for unusual lighting and display systems. , 2011, , .		0
121	Topology design of slender piezoelectric actuators with repetitive component patterns. Journal of Intelligent Material Systems and Structures, 2011, 22, 2161-2172.	1.4	4
122	Topology Optimization Design of Compliant Mechanisms under Uncertainties. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2011, 47, 1.	0.7	3
123	Reliability-based structural optimization with probability and convex set hybrid models. Structural and Multidisciplinary Optimization, 2010, 42, 89-102.	1.7	111
124	A strain-isolation design for stretchable electronics. Acta Mechanica Sinica/Lixue Xuebao, 2010, 26, 881-888.	1.5	34
125	Mechanics analysis of two-dimensionally prestrained elastomeric thin film for stretchable electronics. Acta Mechanica Solida Sinica, 2010, 23, 592-599.	1.0	11
126	Waterproof AlInGaP optoelectronics on stretchable substrates with applications in biomedicine andÂrobotics. Nature Materials, 2010, 9, 929-937.	13.3	557

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127	Topology optimization of bending actuators with multilayer piezoelectric material. Smart Materials and Structures, 2010, 19, 075018.	1.8	30
128	Buckling behavior of carbon nanotube-based intramolecular junctions under compression: Molecular dynamics simulation and finite element analysis. Computational Materials Science, 2010, 50, 253-259.	1.4	47
129	Structural OptimizationÂfor Wall FrameÂDesign of a Forging Manipulator. Lecture Notes in Computer Science, 2010, , 317-328.	1.0	0
130	Continuum topology optimization with non-probabilistic reliability constraints based on multi-ellipsoid convex model. Structural and Multidisciplinary Optimization, 2009, 39, 297-310.	1.7	197
131	Non-probabilistic reliability-based topology optimization of geometrically nonlinear structures using convex models. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 3228-3238.	3.4	179
132	A level set method for structural shape and topology optimization using radial basis functions. Computers and Structures, 2009, 87, 425-434.	2.4	100
133	Structural reliability assessment based on probability and convex set mixed model. Computers and Structures, 2009, 87, 1408-1415.	2.4	158
134	Topology optimization of space vehicle structures considering attitude control effort. Finite Elements in Analysis and Design, 2009, 45, 431-438.	1.7	22
135	Topology optimization-based distribution design of actuation voltage in static shape control of plates. Computers and Structures, 2008, 86, 1885-1893.	2.4	55
136	Integrated Optimization of Material Layout and Control Voltage for Piezoelectric Laminated Plates. Journal of Intelligent Material Systems and Structures, 2008, 19, 889-904.	1.4	71
137	Perturbation-based stochastic FE analysis and robust design of inelastic deformation processes. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 2231-2251.	3.4	34
138	Robust design of non-linear structures using optimization methods. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 1779-1795.	3.4	56
139	Robust design of structures using optimization methods. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 2221-2237.	3.4	248
140	Buckling design optimization of complex built-up structures with shape and size variables. Structural and Multidisciplinary Optimization, 2000, 19, 183-191.	1.7	15
141	STRUCTURAL OPTIMIZATION FOR PRACTICAL ENGINEERING: SOFTWARE DEVELOPMENT AND APPLICATIONS * *Project supported by the Scientific Fund for National Outstanding Youth of China (19525206). , 1999, , 157-168.		0
142	New generation software of structural analysis and design optimization–JIFEX. Structural Engineering and Mechanics, 1999, 7, 589-599.	1.0	11
143	Dynamic sensitivity analysis and optimum design of aerospace structures. Structural Engineering and Mechanics, 1998, 6, 31-40.	1.0	8
144	Dynamic optimization of a turbine foundation. Structural Optimization, 1997, 13, 244-249.	0.7	7