

Fengwen Wang

List of Publications by Year in descending order

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209
papers

21,846
citations

14655

66
h-index

10158

140
g-index

210
all docs

210
docs citations

210
times ranked

6306
citing authors

#	ARTICLE	IF	CITATIONS
1	De-homogenization using convolutional neural networks. Computer Methods in Applied Mechanics and Engineering, 2022, 388, 114197.	6.6	12
2	Topology optimization of damage-resistant structures with a predefined load-bearing capacity. International Journal for Numerical Methods in Engineering, 2022, 123, 1114-1145.	2.8	5
3	Topology optimization guided by a geometrical pattern library. Structural and Multidisciplinary Optimization, 2022, 65, 1.	3.5	7
4	Ultra-broadband edge-state pair for zigzag-interfaced valley Hall insulators. Science China: Physics, Mechanics and Astronomy, 2022, 65, 1.	5.1	12
5	Digital synthesis of free-form multimaterial structures for realization of arbitrary programmed mechanical responses. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2120563119.	7.1	17
6	Topology optimization of structures with infill-supported enclosed voids for additive manufacturing. Additive Manufacturing, 2022, 55, 102795.	3.0	3
7	Topology Optimization of Graded Truss Lattices Based on On-the-Fly Homogenization. Journal of Applied Mechanics, Transactions ASME, 2022, 89, .	2.2	12
8	On the competition for ultimately stiff and strong architected materials. Materials and Design, 2021, 198, 109356.	7.0	32
9	Topology optimization of ultra high resolution shell structures. Thin-Walled Structures, 2021, 160, 107349.	5.3	23
10	Inverse design in photonics by topology optimization: tutorial. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 496.	2.1	103
11	Compact 200 line MATLAB code for inverse design in photonics by topology optimization: tutorial. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 510.	2.1	30
12	Design of metamaterial mechanisms using robust topology optimization and variable linking scheme. Structural and Multidisciplinary Optimization, 2021, 63, 1975-1988.	3.5	14
13	Internal contact modeling for finite strain topology optimization. Computational Mechanics, 2021, 67, 1099-1114.	4.0	14
14	Topology optimization of multi-scale structures: a review. Structural and Multidisciplinary Optimization, 2021, 63, 1455-1480.	3.5	206
15	Topology optimization with linearized buckling criteria in 250 lines of Matlab. Structural and Multidisciplinary Optimization, 2021, 63, 3045-3066.	3.5	34
16	On approaches for avoiding low-stiffness regions in variable thickness sheet and homogenization-based topology optimization. Structural and Multidisciplinary Optimization, 2021, 64, 39-52.	3.5	11
17	Revisiting the optimal thickness profile of cooling fins: A one-dimensional analytical study using optimality conditions. , 2021, , .		1
18	Topology optimization of microvascular composites for active-cooling applications using a geometrical reduced-order model. Structural and Multidisciplinary Optimization, 2021, 64, 563.	3.5	1

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19	Design of composite structures with programmable elastic responses under finite deformations. Journal of the Mechanics and Physics of Solids, 2021, 151, 104356.	4.8	20
20	3D architected isotropic materials with tunable stiffness and buckling strength. Journal of the Mechanics and Physics of Solids, 2021, 152, 104415.	4.8	17
21	Complementary lecture notes for teaching the 99/88-line topology optimization codes. Structural and Multidisciplinary Optimization, 2021, 64, 3227-3231.	3.5	4
22	Local versus global stress constraint strategies in topology optimization: A comparative study. International Journal for Numerical Methods in Engineering, 2021, 122, 6003-6036.	2.8	34
23	Plate microstructures with extreme stiffness for arbitrary multi-loadings. Computer Methods in Applied Mechanics and Engineering, 2021, 381, 113778.	6.6	8
24	Topology Optimization of Large-Scale 3D Morphing Wing Structures. Actuators, 2021, 10, 217.	2.3	13
25	Ultra-coherent nanomechanical resonators based on inverse design. Nature Communications, 2021, 12, 5766.	12.8	37
26	Reduced-order methods for dynamic problems in topology optimization: A comparative study. Computer Methods in Applied Mechanics and Engineering, 2021, 387, 114149.	6.6	32
27	Self-supporting structure design with feature-driven optimization approach for additive manufacturing. Computer Methods in Applied Mechanics and Engineering, 2021, 386, 114110.	6.6	19
28	Three-dimensional manufacturing tolerant topology optimization with hundreds of millions of local stress constraints. International Journal for Numerical Methods in Engineering, 2021, 122, 548-578.	2.8	42
29	A comprehensive review of educational articles on structural and multidisciplinary optimization. Structural and Multidisciplinary Optimization, 2021, 64, 2827-2880.	3.5	57
30	Experimental Realization of Topology-Optimized InP Photonic Cavities with Extreme Dielectric Confinement. , 2021, , .		1
31	Nonlinear compressive stability of hyperelastic 2D lattices at finite volume fractions. Journal of the Mechanics and Physics of Solids, 2020, 137, 103851.	4.8	19
32	Quasiperiodic mechanical metamaterials with extreme isotropic stiffness. Extreme Mechanics Letters, 2020, 34, 100596.	4.1	56
33	A "poor man's" approach for high-resolution three-dimensional topology design for natural convection problems. Advances in Engineering Software, 2020, 140, 102736.	3.8	35
34	Additive manufacturing oriented topology optimization of structures with self-supported enclosed voids. Computer Methods in Applied Mechanics and Engineering, 2020, 372, 113385.	6.6	56
35	Efficient hybrid topology and shape optimization combining implicit and explicit design representations. Structural and Multidisciplinary Optimization, 2020, 62, 1061-1069.	3.5	12
36	Topology optimization of two fluid heat exchangers. International Journal of Heat and Mass Transfer, 2020, 163, 120543.	4.8	43

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37	A new generation 99 line Matlab code for compliance topology optimization and its extension to 3D. Structural and Multidisciplinary Optimization, 2020, 62, 2211-2228.	3.5	114
38	Closing the gap towards super-long suspension bridges using computational morphogenesis. Nature Communications, 2020, 11, 2735.	12.8	49
39	Sparse basis pursuit for compliance minimization in the vanishing volume ratio limit. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2020, 100, e202000008.	1.6	3
40	Shape preserving design of thermo-elastic structures considering geometrical nonlinearity. Structural and Multidisciplinary Optimization, 2020, 61, 1787-1804.	3.5	11
41	Topology optimization of compliant mechanisms considering stress constraints, manufacturing uncertainty and geometric nonlinearity. Computer Methods in Applied Mechanics and Engineering, 2020, 365, 112972.	6.6	36
42	De-homogenization of optimal multi-scale 3D topologies. Computer Methods in Applied Mechanics and Engineering, 2020, 364, 112979.	6.6	67
43	Towards solving large-scale topology optimization problems with buckling constraints at the cost of linear analyses. Computer Methods in Applied Mechanics and Engineering, 2020, 363, 112911.	6.6	36
44	EML webinar overview: Topology Optimization " Status and Perspectives. Extreme Mechanics Letters, 2020, 39, 100855.	4.1	15
45	Numerical investigation of stiffness and buckling response of simple and optimized infill structures. Structural and Multidisciplinary Optimization, 2020, 61, 2629-2639.	3.5	20
46	Strongly enhanced upconversion in trivalent erbium ions by tailored gold nanostructures: Toward high-efficient silicon-based photovoltaics. Solar Energy Materials and Solar Cells, 2020, 208, 110406.	6.2	14
47	Systematic design of high-Q prestressed micro membrane resonators. Computer Methods in Applied Mechanics and Engineering, 2020, 361, 112692.	6.6	13
48	Special issue for the 13th world congress on structural and multidisciplinary optimization"editorial note. Structural and Multidisciplinary Optimization, 2020, 61, 2225-2226.	3.5	2
49	Inverse design of nanoparticles for enhanced Raman scattering. Optics Express, 2020, 28, 4444.	3.4	26
50	Topology optimization of microchannel heat sinks using a two-layer model. International Journal of Heat and Mass Transfer, 2019, 143, 118462.	4.8	58
51	A density-based topology optimization methodology for thermal energy storage systems. Structural and Multidisciplinary Optimization, 2019, 60, 2189-2204.	3.5	13
52	Shape preserving design of geometrically nonlinear structures using topology optimization. Structural and Multidisciplinary Optimization, 2019, 59, 1033-1051.	3.5	20
53	Topology optimization and experimental verification of compact E-plane waveguide filters. Microwave and Optical Technology Letters, 2019, 61, 1208-1215.	1.4	4
54	Topology optimization of compliant mechanisms with stress constraints and manufacturing error robustness. Computer Methods in Applied Mechanics and Engineering, 2019, 354, 397-421.	6.6	53

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55	Topological Insulators by Topology Optimization. <i>Physical Review Letters</i> , 2019, 122, 234502.	7.8	78
56	Designing photonic topological insulators with quantum-spin-Hall edge states using topology optimization. <i>Nanophotonics</i> , 2019, 8, 1363-1369.	6.0	48
57	Simple optimal lattice structures for arbitrary loadings. <i>Extreme Mechanics Letters</i> , 2019, 29, 100447.	4.1	25
58	Homogenization-based stiffness optimization and projection of 2D coated structures with orthotropic infill. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 349, 722-742.	6.6	112
59	Revisiting topology optimization with buckling constraints. <i>Structural and Multidisciplinary Optimization</i> , 2019, 59, 1401-1415.	3.5	79
60	A "poor man's" approach to topology optimization of natural convection problems. <i>Structural and Multidisciplinary Optimization</i> , 2019, 59, 1105-1124.	3.5	46
61	Systematic Design of Photonic Crystal Cavities with Ultra-Low Modal Volume Considering Different Fabrication Resolutions. , 2019, , .		0
62	A non-linear material interpolation for design of metallic nano-particles using topology optimization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 343, 23-39.	6.6	42
63	Design of segmented off-diagonal thermoelectric generators using topology optimization. <i>Applied Energy</i> , 2019, 236, 950-960.	10.1	25
64	Stress-constrained topology optimization considering uniform manufacturing uncertainties. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 344, 512-537.	6.6	96
65	Acoustic and photonic topological insulators by topology optimization. , 2019, , .		2
66	Photonic cavity design by topology optimization. , 2019, , .		1
67	On the non-optimality of tree structures for heat conduction. <i>International Journal of Heat and Mass Transfer</i> , 2018, 122, 660-680.	4.8	79
68	Eigenvalue topology optimization via efficient multilevel solution of the frequency response. <i>International Journal for Numerical Methods in Engineering</i> , 2018, 115, 872-892.	2.8	34
69	A density-based topology optimization methodology for thermoelectric energy conversion problems. <i>Structural and Multidisciplinary Optimization</i> , 2018, 57, 1427-1442.	3.5	20
70	Systematic design of 3D auxetic lattice materials with programmable Poisson's ratio for finite strains. <i>Journal of the Mechanics and Physics of Solids</i> , 2018, 114, 303-318.	4.8	112
71	Design of passive coolers for light-emitting diode lamps using topology optimisation. <i>International Journal of Heat and Mass Transfer</i> , 2018, 122, 138-149.	4.8	77
72	Revisiting density-based topology optimization for fluid-structure-interaction problems. <i>Structural and Multidisciplinary Optimization</i> , 2018, 58, 969-995.	3.5	42

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73	Density based topology optimization of turbulent flow heat transfer systems. Structural and Multidisciplinary Optimization, 2018, 57, 1905-1918.	3.5	116
74	Topology optimization of a pseudo 3D thermofluid heat sink model. International Journal of Heat and Mass Transfer, 2018, 121, 1073-1088.	4.8	107
75	Frequency response as a surrogate eigenvalue problem in topology optimization. International Journal for Numerical Methods in Engineering, 2018, 113, 1214-1229.	2.8	28
76	Homogenization-based topology optimization for high-resolution manufacturable microstructures. International Journal for Numerical Methods in Engineering, 2018, 113, 1148-1163.	2.8	224
77	Infill Optimization for Additive Manufacturing—Approaching Bone-Like Porous Structures. IEEE Transactions on Visualization and Computer Graphics, 2018, 24, 1127-1140.	4.4	326
78	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.	4.8	89
79	Optimal design of robust piezoelectric unimorph microgrippers. Applied Mathematical Modelling, 2018, 55, 1-12.	4.2	24
80	Topology optimization of turbulent flows. Computer Methods in Applied Mechanics and Engineering, 2018, 331, 363-393.	6.6	138
81	Which Computational Methods Are Good for Analyzing Large Photonic Crystal Membrane Cavities?. , 2018, , .		0
82	Maximizing the quality factor to mode volume ratio for ultra-small photonic crystal cavities. Applied Physics Letters, 2018, 113, .	3.3	67
83	Dose regularization via filtering and projection: An open-source code for optimization-based proximity-effect-correction for nanoscale lithography. Microelectronic Engineering, 2018, 199, 52-57.	2.4	10
84	Benchmarking five numerical simulation techniques for computing resonance wavelengths and quality factors in photonic crystal membrane line defect cavities. Optics Express, 2018, 26, 11366.	3.4	16
85	Investment casting and experimental testing of heat sinks designed by topology optimization. International Journal of Heat and Mass Transfer, 2018, 127, 396-412.	4.8	59
86	Shape morphing and topology optimization of fluid channels by explicit boundary tracking. International Journal for Numerical Methods in Fluids, 2018, 88, 296-313.	1.6	27
87	Buckling strength topology optimization of 2D periodic materials based on linearized bifurcation analysis. Computer Methods in Applied Mechanics and Engineering, 2018, 339, 115-136.	6.6	88
88	Experimental validation of additively manufactured optimized shapes for passive cooling. Applied Energy, 2018, 226, 330-339.	10.1	64
89	Homogenization-based topology optimization for high-resolution manufacturable microstructures. , 2018, 113, 1148.		1
90	Structural topology optimization of bridge girders in cable supported bridges. , 2018, , .		1

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91	Benchmarking state-of-the-art numerical simulation techniques for analyzing large photonic crystal membrane line defect cavities. , 2018, , .		0
92	Topology optimization for optical microlithography with partially coherent illumination. International Journal for Numerical Methods in Engineering, 2017, 109, 631-647.	2.8	9
93	Combined shape and topology optimization for minimization of maximal von Mises stress. Structural and Multidisciplinary Optimization, 2017, 55, 1541-1557.	3.5	74
94	Maximum length scale in density based topology optimization. Computer Methods in Applied Mechanics and Engineering, 2017, 318, 826-844.	6.6	57
95	Reproducing the hierarchy of disorder for Morpho-inspired, broad-angle color reflection. Scientific Reports, 2017, 7, 46023.	3.3	39
96	Topology optimization of 3D shell structures with porous infill. Acta Mechanica Sinica/Lixue Xuebao, 2017, 33, 778-791.	3.4	57
97	On fully stressed design and p-norm measures in structural optimization. Structural and Multidisciplinary Optimization, 2017, 56, 731-736.	3.5	31
98	A short numerical study on the optimization methods influence on topology optimization. Structural and Multidisciplinary Optimization, 2017, 56, 1603-1612.	3.5	7
99	Giga-voxel computational morphogenesis for structural design. Nature, 2017, 550, 84-86.	27.8	463
100	Topology optimized gold nanostrips for enhanced near-infrared photon upconversion. Applied Physics Letters, 2017, 111, .	3.3	13
101	Minimum compliance topology optimization of shellâ€infill composites for additive manufacturing. Computer Methods in Applied Mechanics and Engineering, 2017, 326, 358-375.	6.6	149
102	Comparison of five computational methods for computing Q factors in photonic crystal membrane cavities. , 2017, , .		0
103	Topology optimization of nanoparticles for localized electromagnetic field enhancement. , 2017, , .		0
104	Higherâ€order multiâ€resolution topology optimization using the finite cell method. International Journal for Numerical Methods in Engineering, 2017, 110, 903-920.	2.8	57
105	Benchmarking five computational methods for analyzing large photonic crystal membrane cavities. , 2017, , .		1
106	Optimization of photonic crystal cavities. , 2017, , .		3
107	Comparison of five numerical methods for computing quality factors and resonance wavelengths in photonic crystal membrane cavities. , 2017, , .		0
108	Topology optimization for simplified structural fire safety. Engineering Structures, 2016, 124, 333-343.	5.3	11

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109	Experimental validation of systematically designed acoustic hyperbolic meta material slab exhibiting negative refraction. Applied Physics Letters, 2016, 109, .	3.3	29
110	Industrial application of topology optimization for combined conductive and convective heat transfer problems. Structural and Multidisciplinary Optimization, 2016, 54, 1045-1060.	3.5	83
111	Improving topology optimization intuition through games. Structural and Multidisciplinary Optimization, 2016, 54, 775-781.	3.5	4
112	Exploiting Additive Manufacturing Infill in Topology Optimization for Improved Buckling Load. Engineering, 2016, 2, 250-257.	6.7	176
113	Large scale three-dimensional topology optimisation of heat sinks cooled by natural convection. International Journal of Heat and Mass Transfer, 2016, 100, 876-891.	4.8	214
114	Length scale and manufacturability in density-based topology optimization. Archive of Applied Mechanics, 2016, 86, 189-218.	2.2	203
115	On the implementation and effectiveness of morphological close-open and open-close filters for topology optimization. Structural and Multidisciplinary Optimization, 2016, 54, 15-21.	3.5	19
116	Designing meta material slabs exhibiting negative refraction using topology optimization. Structural and Multidisciplinary Optimization, 2016, 54, 469-482.	3.5	47
117	Topology optimization of unsteady flow problems using the lattice Boltzmann method. Journal of Computational Physics, 2016, 307, 291-307.	3.8	66
118	On nanostructured silicon success. Nature Photonics, 2016, 10, 142-143.	31.4	8
119	On the (non-)optimality of Michell structures. Structural and Multidisciplinary Optimization, 2016, 54, 361-373.	3.5	119
120	Experimental validation of a topology optimized acoustic cavity. Journal of the Acoustical Society of America, 2015, 138, 3470-3474.	1.1	14
121	Topology Optimized Architectures with Programmable Poisson's Ratio over Large Deformations. Advanced Materials, 2015, 27, 5523-5527.	21.0	380
122	Minimum length scale in topology optimization by geometric constraints. Computer Methods in Applied Mechanics and Engineering, 2015, 293, 266-282.	6.6	275
123	Topology optimization of coated structures and material interface problems. Computer Methods in Applied Mechanics and Engineering, 2015, 290, 524-541.	6.6	142
124	Stress-constrained topology optimization for compliant mechanism design. Structural and Multidisciplinary Optimization, 2015, 52, 929-943.	3.5	97
125	Creating geometrically robust designs for highly sensitive problems using topology optimization. Structural and Multidisciplinary Optimization, 2015, 52, 737-754.	3.5	62
126	3D interactive topology optimization on hand-held devices. Structural and Multidisciplinary Optimization, 2015, 51, 1385-1391.	3.5	12

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127	Topology Optimized Architectures with Programmable Poisson's Ratio over Large Deformations. , 2015, 27, 5523.		1
128	Inverse design of nanostructured surfaces for color effects. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 164.	2.1	41
129	Topology optimization for optical projection lithography with manufacturing uncertainties. Applied Optics, 2014, 53, 2720.	1.8	34
130	Topology optimisation for natural convection problems. International Journal for Numerical Methods in Fluids, 2014, 76, 699-721.	1.6	149
131	On the realization of the bulk modulus bounds for two-phase viscoelastic composites. Journal of the Mechanics and Physics of Solids, 2014, 63, 228-241.	4.8	48
132	Design of manufacturable 3D extremal elastic microstructure. Mechanics of Materials, 2014, 69, 1-10.	3.2	258
133	Topology optimization using an explicit interface representation. Structural and Multidisciplinary Optimization, 2014, 49, 387-399.	3.5	67
134	Topology optimization of fail-safe structures using a simplified local damage model. Structural and Multidisciplinary Optimization, 2014, 49, 657-666.	3.5	95
135	Topology optimization with flexible void area. Structural and Multidisciplinary Optimization, 2014, 50, 927-943.	3.5	28
136	Interpolation scheme for fictitious domain techniques and topology optimization of finite strain elastic problems. Computer Methods in Applied Mechanics and Engineering, 2014, 276, 453-472.	6.6	171
137	Design of materials with prescribed nonlinear properties. Journal of the Mechanics and Physics of Solids, 2014, 69, 156-174.	4.8	143
138	Topology-optimized broadband surface relief transmission grating. Proceedings of SPIE, 2014, , .	0.8	1
139	Shape optimization of the stokes flow problem based on isogeometric analysis. Structural and Multidisciplinary Optimization, 2013, 48, 965-977.	3.5	30
140	On the similarities between micro/nano lithography and topology optimization projection methods. Structural and Multidisciplinary Optimization, 2013, 48, 717-730.	3.5	24
141	Robust topology optimization accounting for misplacement of material. Structural and Multidisciplinary Optimization, 2013, 47, 317-333.	3.5	61
142	Discontinuous Galerkin solution of a phase-field model in isothermal chemical vapor infiltration of SiC. Journal of Engineering Mathematics, 2013, 78, 261-274.	1.2	3
143	Topology optimization approaches. Structural and Multidisciplinary Optimization, 2013, 48, 1031-1055.	3.5	1,851
144	Experimental Validation of Topology Optimization for RF MEMS Capacitive Switch Design. Journal of Microelectromechanical Systems, 2013, 22, 1296-1309.	2.5	27

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145	Interactive topology optimization on hand-held devices. Structural and Multidisciplinary Optimization, 2013, 47, 1-6.	3.5	41
146	Reinforcement layout design for concrete structures based on continuum damage and truss topology optimization. Structural and Multidisciplinary Optimization, 2013, 47, 157-174.	3.5	93
147	Topology Optimization of Stressed Capacitive RF MEMS Switches. Journal of Microelectromechanical Systems, 2013, 22, 206-215.	2.5	36
148	Topological design of electromechanical actuators with robustness toward over- and under-etching. Computer Methods in Applied Mechanics and Engineering, 2013, 253, 237-251.	6.6	76
149	Robust topology design of periodic grating surfaces. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 2935.	2.1	12
150	Systematic design of loss-engineered slow-light waveguides. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 2657.	1.5	20
151	Towards all-dielectric, polarization-independent optical cloaks. Applied Physics Letters, 2012, 100, 101106.	3.3	62
152	Topology optimization considering material and geometric uncertainties using stochastic collocation methods. Structural and Multidisciplinary Optimization, 2012, 46, 597-612.	3.5	102
153	Sensitivity filtering from a continuum mechanics perspective. Structural and Multidisciplinary Optimization, 2012, 46, 471-475.	3.5	63
154	Efficient reanalysis techniques for robust topology optimization. Computer Methods in Applied Mechanics and Engineering, 2012, 245-246, 217-231.	6.6	50
155	High-performance slow light photonic crystal waveguides with topology optimized or circular-hole based material layouts. Photonics and Nanostructures - Fundamentals and Applications, 2012, 10, 378-388.	2.0	37
156	Plasmonic versus dielectric enhancement in thin-film solar cells. Applied Physics Letters, 2012, 100, 211914.	3.3	25
157	Fundamental Limitations to Gain Enhancement in Periodic Media and Waveguides. Physical Review Letters, 2012, 108, 183903.	7.8	45
158	Fundamental limitations to gain enhancement in slow-light photonic structures. , 2012, , .		0
159	Topology optimization of nano-photonic systems. , 2012, , .		0
160	Topology Optimization of Sub-Wavelength Antennas. IEEE Transactions on Antennas and Propagation, 2011, 59, 58-69.	5.1	68
161	Modelling of active semiconductor photonic crystal waveguides and robust designs based on topology optimization. , 2011, , .		0
162	Robust topology optimization of photonic crystal waveguides with tailored dispersion properties. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 387.	2.1	133

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163	Systematic design of slow-light photonic waveguides. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 2374.	2.1	18
164	On reducing computational effort in topology optimization: how far can we go?. Structural and Multidisciplinary Optimization, 2011, 44, 25-29.	3.5	48
165	Efficient topology optimization in MATLAB using 88 lines of code. Structural and Multidisciplinary Optimization, 2011, 43, 1-16.	3.5	969
166	Saturated poroelastic actuators generated by topology optimization. Structural and Multidisciplinary Optimization, 2011, 43, 693-706.	3.5	20
167	On projection methods, convergence and robust formulations in topology optimization. Structural and Multidisciplinary Optimization, 2011, 43, 767-784.	3.5	1,078
168	On the usefulness of non-gradient approaches in topology optimization. Structural and Multidisciplinary Optimization, 2011, 43, 589-596.	3.5	317
169	Comparison between different dispersion engineering methods in slow light photonic crystal waveguides. , 2011, , .		0
170	Topology optimized low-contrast all-dielectric optical cloak. Applied Physics Letters, 2011, 98, .	3.3	126
171	Topology optimization of ultra-fast nano-photonic switches. , 2011, , .		0
172	On projection methods, convergence and robust formulations in topology optimization. , 2011, 43, 767.		1
173	Systematic and robust design of photonic crystal waveguides by topology optimization. , 2010, , .		0
174	A topology optimization method for design of negative permeability metamaterials. Structural and Multidisciplinary Optimization, 2010, 41, 163-177.	3.5	156
175	Efficient use of iterative solvers in nested topology optimization. Structural and Multidisciplinary Optimization, 2010, 42, 55-72.	3.5	68
176	Phase-Field Model for the Chemical Vapor Infiltration of Silicon Carbide. Journal of the Electrochemical Society, 2010, 157, D377.	2.9	6
177	Design of one-dimensional optical pulse-shaping filters by time-domain topology optimization. Applied Physics Letters, 2009, 95, .	3.3	23
178	Topology optimization of microfluidic mixers. International Journal for Numerical Methods in Fluids, 2009, 61, 498-513.	1.6	120
179	Approximate reanalysis in topology optimization. International Journal for Numerical Methods in Engineering, 2009, 78, 1474-1491.	2.8	81
180	Manufacturing tolerant topology optimization. Acta Mechanica Sinica/Lixue Xuebao, 2009, 25, 227-239.	3.4	328

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181	Topological material layout in plates for vibration suppression and wave propagation control. Structural and Multidisciplinary Optimization, 2009, 37, 585-594.	3.5	26
182	Improving the acousto-optical interaction in a Mach-Zehnder interferometer. Journal of Applied Physics, 2009, 105, 083529.	2.5	17
183	Topology optimization of large scale stokes flow problems. Structural and Multidisciplinary Optimization, 2008, 35, 175-180.	3.5	113
184	Topology optimization for transient wave propagation problems in one dimension. Structural and Multidisciplinary Optimization, 2008, 36, 585-595.	3.5	79
185	A monolithic approach for topology optimization of electrostatically actuated devices. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 4062-4075.	6.6	44
186	Topology optimized electrothermal polysilicon microgrippers. Microelectronic Engineering, 2008, 85, 1096-1099.	2.4	34
187	Three-dimensional topology optimized electrically-small conformal antenna. , 2008, , .		4
188	Geometric Properties of Optimal Photonic Crystals. Physical Review Letters, 2008, 100, 153904.	7.8	154
189	TOPOLOGY OPTIMIZATION. , 2007, , 161-194.		8
190	Topology optimization of acoustic-structure interaction problems using a mixed finite element formulation. International Journal for Numerical Methods in Engineering, 2007, 70, 1049-1075.	2.8	171
191	Topology Optimal Design of Material Microstructures Using Strain Energy-based Method. Chinese Journal of Aeronautics, 2007, 20, 320-326.	5.3	28
192	Morphology-based black and white filters for topology optimization. Structural and Multidisciplinary Optimization, 2007, 33, 401-424.	3.5	1,219
193	Using strain energy-based prediction of effective elastic properties in topology optimization of material microstructures. Acta Mechanica Sinica/Lixue Xuebao, 2007, 23, 77-89.	3.4	85
194	Optical characterisation of photonic wire and photonic crystal waveguides fabricated using nanoimprint lithography. , 2006, , .		0
195	Maximizing band gaps in plate structures. Structural and Multidisciplinary Optimization, 2006, 32, 263-275.	3.5	140
196	Topology Optimization for Photonic Crystal Waveguide with Wide and Flat Bandwidths in Ultra-Fast All-Optical Switch (PC-SMZ). , 2006, , .		1
197	Topology optimization of photonic crystal structures: a high-bandwidth low-loss T-junction waveguide. Journal of the Optical Society of America B: Optical Physics, 2005, 22, 1191.	2.1	199
198	Systematic design of photonic crystal structures using topology optimization: Low-loss waveguide bends. Applied Physics Letters, 2004, 84, 2022-2024.	3.3	249

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