Yi Min Xie

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

 258
 11,051
 51
 98

 papers
 citations
 h-index
 g-index

 269
 13,894
 3.8
 6.84

 ext. papers
 ext. citations
 avg, IF
 L-index

#	Paper	IF	Citations
258	Mechanical properties of concrete composites with auxetic single and layered honeycomb structures. <i>Construction and Building Materials</i> , 2022 , 322, 126453	6.7	10
257	Digital manufacturing for earth construction: A critical review. <i>Journal of Cleaner Production</i> , 2022 , 338, 130630	10.3	3
256	Static and dynamic properties of a perforated metallic auxetic metamaterial with tunable stiffness and energy absorption. <i>International Journal of Impact Engineering</i> , 2022 , 164, 104193	4	11
255	Structural topology optimization with an adaptive design domain. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022 , 389, 114382	5.7	2
254	A novel auxetic chiral lattice composite: Experimental and numerical study. <i>Composite Structures</i> , 2022 , 282, 115043	5.3	16
253	Mechanical properties of foam-filled hexagonal and re-entrant honeycombs under uniaxial compression. <i>Composite Structures</i> , 2022 , 280, 114922	5.3	16
252	Mechanical properties of foam-filled auxetic circular tubes: Experimental and numerical study. <i>Thin-Walled Structures</i> , 2022 , 170, 108584	4.7	11
251	Manufacturing, characteristics and applications of auxetic foams: A state-of-the-art review. <i>Composites Part B: Engineering</i> , 2022 , 235, 109733	10	12
250	A novel auxetic metamaterial with enhanced mechanical properties and tunable auxeticity. <i>Thin-Walled Structures</i> , 2022 , 174, 109162	4.7	6
249	Globally continuous hybrid path for extrusion-based additive manufacturing. <i>Automation in Construction</i> , 2022 , 137, 104175	9.6	1
248	Experimental and computational investigations of novel 3D printed square tubular lattice metamaterials with negative Poisson ratio. <i>Additive Manufacturing</i> , 2022 , 55, 102789	6.1	3
247	Ballistic performance of a lightweight nacre-inspired armour panel handle numerical study. <i>Composites Part C: Open Access</i> , 2022 , 8, 100259	1.6	
246	Design and mechanical characteristics of auxetic metamaterial with tunable stiffness. <i>International Journal of Mechanical Sciences</i> , 2022 , 223, 107286	5.5	8
245	Continuous contour-zigzag hybrid toolpath for large format additive manufacturing. <i>Additive Manufacturing</i> , 2022 , 55, 102822	6.1	0
244	Lightweight auxetic metamaterials: Design and characteristic study. Composite Structures, 2022, 115706	55.3	3
243	A thinning algorithm based approach to controlling structural complexity in topology optimization. <i>Finite Elements in Analysis and Design</i> , 2022 , 207, 103779	2.2	1
242	A novel cement-based auxetic foam composite: Experimental study. <i>Case Studies in Construction Materials</i> , 2022 , 17, e01159	2.7	O

(2021-2022)

241	Body-fitted bi-directional evolutionary structural optimization using nonlinear diffusion regularization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022 , 396, 115114	5.7	О	
240	A novel auxetic acoustic metamaterial plate with tunable bandgap. <i>International Journal of Mechanical Sciences</i> , 2022 , 226, 107414	5.5	4	
239	Generalized topology optimization for architectural design 2022, 1,		1	
238	Design and analysis of an auxetic metamaterial with tuneable stiffness. <i>Composite Structures</i> , 2021 , 11	4997	8	
237	Detail control strategies for topology optimization in architectural design and development. <i>Frontiers of Architectural Research</i> , 2021 ,	2.3	4	
236	A novel buckling-restrained brace with auxetic perforated core: Experimental and numerical studies. <i>Engineering Structures</i> , 2021 , 249, 113223	4.7	18	
235	Stacked-origami mechanical metamaterial with tailored multistage stiffness. <i>Materials and Design</i> , 2021 , 212, 110203	8.1	4	
234	Evolutionary topology optimization for structures made of multiple materials with different properties in tension and compression. <i>Composite Structures</i> , 2021 , 259, 113497	5.3	10	
233	Optimizing Support Locations in the Rooffolumn Structural System. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 2775	2.6	2	
232	Numerical simulation of three-dimensional multicomponent CahnHilliard systems. <i>International Journal of Mechanical Sciences</i> , 2021 , 198, 106349	5.5	3	
231	Design, manufacturing and applications of auxetic tubular structures: A review. <i>Thin-Walled Structures</i> , 2021 , 163, 107682	4.7	34	
230	A novel type of tubular structure with auxeticity both in radial direction and wall thickness. <i>Thin-Walled Structures</i> , 2021 , 163, 107758	4.7	22	
229	Controlling the maximum first principal stress in topology optimization. <i>Structural and Multidisciplinary Optimization</i> , 2021 , 63, 327-339	3.6	11	
228	A 101-line MATLAB code for topology optimization using binary variables and integer programming. <i>Structural and Multidisciplinary Optimization</i> , 2021 , 63, 935-954	3.6	10	
227	Inspiration from Nature's body armours 🖪 review of biological and bioinspired composites. <i>Composites Part B: Engineering</i> , 2021 , 205, 108513	10	30	
226	A reaction diffusion-based level set method using body-fitted mesh for structural topology optimization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021 , 381, 113829	5.7	3	
225	Creating novel furniture through topology optimization and advanced manufacturing. Rapid Prototyping Journal, 2021, ahead-of-print,	3.8	5	
224	Topology of leaf veins: Experimental observation and computational morphogenesis. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021 , 123, 104788	4.1	1	

223	Based on auxetic foam: A novel type of seismic metamaterial for Lamb waves. <i>Engineering Structures</i> , 2021 , 246, 112976	4.7	21
222	A novel combined auxetic tubular structure with enhanced tunable stiffness. <i>Composites Part B: Engineering</i> , 2021 , 226, 109303	10	17
221	Simultaneously optimizing supports and topology in structural design. <i>Finite Elements in Analysis and Design</i> , 2021 , 197, 103633	2.2	3
220	Mechanical Properties of Additively Manufactured Thermoplastic Polyurethane (TPU) Material Affected by Various Processing Parameters. <i>Polymers</i> , 2020 , 12,	4.5	9
219	Topological optimization of continuum structures for additive manufacturing considering thin feature and support structure constraints. <i>Engineering Optimization</i> , 2020 , 1-22	2	7
218	Stochastic approaches to generating diverse and competitive structural designs in topology optimization. <i>Finite Elements in Analysis and Design</i> , 2020 , 173, 103399	2.2	17
217	Topology optimization of 3D continuum structures under geometric self-supporting constraint. <i>Additive Manufacturing</i> , 2020 , 36, 101422	6.1	14
216	Re-entrant auxetic lattices with enhanced stiffness: A numerical study. <i>International Journal of Mechanical Sciences</i> , 2020 , 178, 105619	5.5	27
215	Lessons Learnt from a National Competition on Structural Optimization and Additive Manufacturing. <i>Current Chinese Science</i> , 2020 , 1, 151-159	0.2	4
214	A direct approach to controlling the topology in structural optimization. <i>Computers and Structures</i> , 2020 , 227, 106141	4.5	17
213	Anisotropic design and optimization of conformal gradient lattice structures. <i>CAD Computer Aided Design</i> , 2020 , 119, 102787	2.9	30
212	Morphological optimization of scorpion telson. <i>Journal of the Mechanics and Physics of Solids</i> , 2020 , 135, 103773	5	13
211	Mechanical behaviour of composite structures made of topologically interlocking concrete bricks with soft interfaces. <i>Materials and Design</i> , 2020 , 186, 108347	8.1	8
210	The robust fail-safe topological designs based on the von Mises stress. <i>Finite Elements in Analysis and Design</i> , 2020 , 171, 103376	2.2	14
209	A new approach to eliminating enclosed voids in topology optimization for additive manufacturing. <i>Additive Manufacturing</i> , 2020 , 32, 101006	6.1	13
208	Static and dynamic properties of pre-twisted leaves and stalks with varying chiral morphologies. <i>Extreme Mechanics Letters</i> , 2020 , 34, 100612	3.9	5
207	A computational investigation into the impact resistance of a precise finite element model derived from micro-CT data of a woodpecker's head. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020 , 112, 104107	4.1	О
206	A reactiondiffusion based level set method for image segmentation in three dimensions. <i>Engineering Applications of Artificial Intelligence</i> , 2020 , 96, 103998	7.2	4

(2018-2019)

205	Simple and effective strategies for achieving diverse and competitive structural designs. <i>Extreme Mechanics Letters</i> , 2019 , 30, 100481	3.9	17
204	Nonlinear dynamic behavior of a clampedlamped beam from BNC nanotube impacted by fullerene. <i>Nonlinear Dynamics</i> , 2019 , 96, 1133-1145	5	9
203	On hybrid cellular materials based on triply periodic minimal surfaces with extreme mechanical properties. <i>Materials and Design</i> , 2019 , 183, 108109	8.1	50
202	Comparison of Mechanical Properties and Energy Absorption of Sheet-Based and Strut-Based Gyroid Cellular Structures with Graded Densities. <i>Materials</i> , 2019 , 12,	3.5	43
201	A maze-like path generation scheme for fused deposition modeling. <i>International Journal of Advanced Manufacturing Technology</i> , 2019 , 104, 1509-1519	3.2	12
200	Topology optimization of continuum structures under hybrid additive-subtractive manufacturing constraints. <i>Structural and Multidisciplinary Optimization</i> , 2019 , 60, 2571-2595	3.6	18
199	Additive manufacturing of specific ankle-foot orthoses for persons after stroke: A preliminary study based on gait analysis data. <i>Mathematical Biosciences and Engineering</i> , 2019 , 16, 8134-8143	2.1	16
198	Numerical investigation of tubular structures generated by cutting method and pattern scale factor (PSF) method. <i>Pigment and Resin Technology</i> , 2019 , ahead-of-print,	1	2
197	Thermal shrinkage and stability of diamondene nanotubes. <i>Nanotechnology</i> , 2019 , 30, 075702	3.4	1
196	Nanotextures from orthogonal graphene ribbons: Thermal stability evaluation. <i>Carbon</i> , 2019 , 144, 81-9	0 10.4	8
196 195	Nanotextures from orthogonal graphene ribbons: Thermal stability evaluation. <i>Carbon</i> , 2019 , 144, 81-9 Topology optimization of dynamic stress response reliability of continuum structures involving multi-phase materials. <i>Structural and Multidisciplinary Optimization</i> , 2019 , 59, 851-876	0 10.4 3.6	5
	Topology optimization of dynamic stress response reliability of continuum structures involving		
195	Topology optimization of dynamic stress response reliability of continuum structures involving multi-phase materials. <i>Structural and Multidisciplinary Optimization</i> , 2019 , 59, 851-876	3.6	5
195	Topology optimization of dynamic stress response reliability of continuum structures involving multi-phase materials. <i>Structural and Multidisciplinary Optimization</i> , 2019 , 59, 851-876 On sound insulation of pyramidal lattice sandwich structure. <i>Composite Structures</i> , 2019 , 208, 385-394 Topology optimization of continuum structures for natural frequencies considering casting	3.6 5·3	5
195 194 193	Topology optimization of dynamic stress response reliability of continuum structures involving multi-phase materials. <i>Structural and Multidisciplinary Optimization</i> , 2019 , 59, 851-876 On sound insulation of pyramidal lattice sandwich structure. <i>Composite Structures</i> , 2019 , 208, 385-394 Topology optimization of continuum structures for natural frequencies considering casting constraints. <i>Engineering Optimization</i> , 2019 , 51, 941-960 Coupling effect of van der Waals, centrifugal, and frictional forces on a GHz rotation-translation	3.6 5·3 2	5 50 15
195 194 193	Topology optimization of dynamic stress response reliability of continuum structures involving multi-phase materials. <i>Structural and Multidisciplinary Optimization</i> , 2019 , 59, 851-876 On sound insulation of pyramidal lattice sandwich structure. <i>Composite Structures</i> , 2019 , 208, 385-394 Topology optimization of continuum structures for natural frequencies considering casting constraints. <i>Engineering Optimization</i> , 2019 , 51, 941-960 Coupling effect of van der Waals, centrifugal, and frictional forces on a GHz rotation-translation nano-convertor. <i>Physical Chemistry Chemical Physics</i> , 2018 , 21, 359-368 Impact behaviour of plate-like assemblies made of new and existing interlocking bricks: A	3.6 5·3 2	5 50 15 4
195 194 193 192	Topology optimization of dynamic stress response reliability of continuum structures involving multi-phase materials. <i>Structural and Multidisciplinary Optimization</i> , 2019 , 59, 851-876 On sound insulation of pyramidal lattice sandwich structure. <i>Composite Structures</i> , 2019 , 208, 385-394 Topology optimization of continuum structures for natural frequencies considering casting constraints. <i>Engineering Optimization</i> , 2019 , 51, 941-960 Coupling effect of van der Waals, centrifugal, and frictional forces on a GHz rotation-translation nano-convertor. <i>Physical Chemistry Chemical Physics</i> , 2018 , 21, 359-368 Impact behaviour of plate-like assemblies made of new and existing interlocking bricks: A comparative study. <i>International Journal of Impact Engineering</i> , 2018 , 116, 79-93 Systematic review of acupuncture placebo devices with a focus on the credibility of blinding of	3.6 5·3 2 3.6	5 50 15 4

187	Design optimization and additive manufacturing of nodes in gridshell structures. <i>Engineering Structures</i> , 2018 , 160, 161-170	4.7	28
186	A nano continuous variable transmission system from nanotubes. <i>Nanotechnology</i> , 2018 , 29, 075707	3.4	3
185	Auxetic metamaterials and structures: a review. Smart Materials and Structures, 2018, 27, 023001	3.4	348
184	Buckling behavior of nanotubes from diamondene. <i>Materials and Design</i> , 2018 , 149, 34-42	8.1	16
183	Robust topology optimization for continuum structures with random loads. <i>Engineering Computations</i> , 2018 , 35, 710-732	1.4	15
182	Bi-directional Evolutionary Structural Optimization on Advanced Structures and Materials: A Comprehensive Review. <i>Archives of Computational Methods in Engineering</i> , 2018 , 25, 437-478	7.8	134
181	Auxetic nail: Design and experimental study. <i>Composite Structures</i> , 2018 , 184, 288-298	5.3	77
180	Concurrent topological design of composite structures and materials containing multiple phases of distinct Poisson ratios. <i>Engineering Optimization</i> , 2018 , 50, 599-614	2	6
179	Thermal and tensile properties of diamondene at finite temperature: A molecular dynamics study. <i>Materials and Design</i> , 2018 , 156, 125-134	8.1	12
178	Softening to hardening of stretched diamondene nanotubes. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 21136-21143	3.6	6
177	Optimal design and modeling of gyroid-based functionally graded cellular structures for additive manufacturing. <i>CAD Computer Aided Design</i> , 2018 , 104, 87-99	2.9	106
176	Topology optimization of binary microstructures involving various non-volume constraints. <i>Computational Materials Science</i> , 2018 , 154, 405-425	3.2	16
175	Shell buckling: from morphogenesis of soft matter to prospective applications. <i>Bioinspiration and Biomimetics</i> , 2018 , 13, 051001	2.6	9
174	Mechanical behaviour of a creased thin strip. <i>Mechanical Sciences</i> , 2018 , 9, 91-102	1.3	5
173	Multi-objective optimization of multi-cell tubes with origami patterns for energy absorption. <i>Thin-Walled Structures</i> , 2018 , 123, 100-113	4.7	31
172	Designing novel structures with hierarchically synchronized deformations. <i>Extreme Mechanics Letters</i> , 2018 , 19, 1-6	3.9	3
171	Design and characterisation of a tuneable 3D buckling-induced auxetic metamaterial. <i>Materials and Design</i> , 2018 , 139, 336-342	8.1	87
170	Examination of needle surface corrosion in electroacupuncture. <i>Acupuncture in Medicine</i> , 2018 , 36, 367-	37.6	2

(2016-2018)

169	On the internal architecture of emergent plants. <i>Journal of the Mechanics and Physics of Solids</i> , 2018 , 119, 224-239	5	28
168	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	10
167	Design of dimpled tubular structures for energy absorption. <i>Thin-Walled Structures</i> , 2017 , 112, 31-40	4.7	26
166	An Efficient Method for Topology Optimization of Continuum Structures in the Presence of Uncertainty in Loading Direction. <i>International Journal of Computational Methods</i> , 2017 , 14, 1750054	1.1	17
165	Design of Hierarchical Structures for Synchronized Deformations. <i>Scientific Reports</i> , 2017 , 7, 41183	4.9	7
164	Designing composites with negative linear compressibility. <i>Materials and Design</i> , 2017 , 131, 343-357	8.1	18
163	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	5.5	9
162	A new node-shifting method for shape optimization of reticulated spatial structures. <i>Engineering Structures</i> , 2017 , 152, 727-735	4.7	12
161	High-speed spinning disks on flexible threads. Scientific Reports, 2017, 7, 13111	4.9	6
160	Pump drill: A superb device for converting translational motion into high-speed rotation. <i>Extreme Mechanics Letters</i> , 2017 , 16, 56-63	3.9	3
159	The impact behaviour of plate-like assemblies made of new interlocking bricks: An experimental study. <i>Materials and Design</i> , 2017 , 134, 361-373	8.1	15
158	Layout optimization of continuum structures considering the probabilistic and fuzzy directional uncertainty of applied loads based on the cloud model. <i>Structural and Multidisciplinary Optimization</i> , 2016 , 53, 81-100	3.6	40
157	A Kirigami Approach to Forming a Synthetic Buckliball. Scientific Reports, 2016, 6, 33016	4.9	9
156	On the shape transformation of cone scales. <i>Soft Matter</i> , 2016 , 12, 9797-9802	3.6	15
155	Lattice Ti structures with low rigidity but compatible mechanical strength: Design of implant materials for trabecular bone. <i>International Journal of Precision Engineering and Manufacturing</i> , 2016 , 17, 793-799	1.7	22
154	Dynamic response reliability based topological optimization of continuum structures involving multi-phase materials. <i>Composite Structures</i> , 2016 , 149, 134-144	5.3	10
153	A simple auxetic tubular structure with tuneable mechanical properties. <i>Smart Materials and Structures</i> , 2016 , 25, 065012	3.4	66
152	A New Approach Based on Strain Sensitivity for Reinforcement Optimization in Slope Stability Problems. <i>Geotechnical and Geological Engineering</i> , 2016 , 34, 713-724	1.5	2

151	Two-scale dynamic optimal design of composite structures in the time domain using equivalent static loads. <i>Composite Structures</i> , 2016 , 142, 335-345	5.3	17
150	Design of lattice structures with controlled anisotropy. <i>Materials and Design</i> , 2016 , 93, 443-447	8.1	133
149	Concurrent topology optimization for minimizing frequency responses of two-level hierarchical structures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2016 , 301, 116-136	5.7	73
148	Topological design and additive manufacturing of porous metals for bone scaffolds and orthopaedic implants: A review. <i>Biomaterials</i> , 2016 , 83, 127-41	15.6	1008
147	TOPOLOGY OPTIMIZATION OF PERIODIC STRUCTURES FOR COUPLED ACOUSTIC-STRUCTURE SYSTEMS 2016 ,		2
146	Tuning the Performance of Metallic Auxetic Metamaterials by Using Buckling and Plasticity. <i>Materials</i> , 2016 , 9,	3.5	42
145	Maximizing the effective Young modulus of a composite material by exploiting the Poisson effect. <i>Composite Structures</i> , 2016 , 153, 593-600	5.3	21
144	A finite-element approach to evaluating the size effects of complex nanostructures. <i>Royal Society Open Science</i> , 2016 , 3, 160625	3.3	4
143	Concurrent topological design of composite thermoelastic macrostructure and microstructure with multi-phase material for maximum stiffness. <i>Composite Structures</i> , 2016 , 150, 84-102	5.3	26
142	Energy absorption of thin-walled tubes with pre-folded origami patterns: Numerical simulation and experimental verification. <i>Thin-Walled Structures</i> , 2016 , 103, 33-44	4.7	83
141	A simple and compact Python code for complex 3D topology optimization. <i>Advances in Engineering Software</i> , 2015 , 85, 1-11	3.6	66
140	Buckling-induced retraction of spherical shells: A study on the shape of aperture. <i>Scientific Reports</i> , 2015 , 5, 11309	4.9	10
139	Concurrent design of composite macrostructure and multi-phase material microstructure for minimum dynamic compliance. <i>Composite Structures</i> , 2015 , 128, 221-233	5.3	37
138	Evolutionary topology optimization for natural frequency maximization problems considering acousticEtructure interaction. <i>Finite Elements in Analysis and Design</i> , 2015 , 106, 56-64	2.2	37
137	Experiments and parametric studies on 3D metallic auxetic metamaterials with tuneable mechanical properties. <i>Smart Materials and Structures</i> , 2015 , 24, 095016	3.4	89
136	Mechanical response of TiAl6V4 lattice structures manufactured by selective laser melting in quasistatic and dynamic compression tests. <i>Journal of Laser Applications</i> , 2015 , 27, S17006	2.1	43
135	Impact of Transaction Attributes on Transaction Costs in Project Alliances: Disaggregated Analysis. Journal of Management in Engineering - ASCE, 2015 , 31, 04014054	5.3	13
134	Topology optimization for microstructures of viscoelastic composite materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015 , 283, 503-516	5.7	66

(2014-2015)

133	Two-scale optimal design of structures with thermal insulation materials. <i>Composite Structures</i> , 2015 , 120, 358-365	5.3	39	
132	Concurrent design of composite macrostructure and cellular microstructure under random excitations. <i>Composite Structures</i> , 2015 , 123, 65-77	5.3	34	
131	Investigating size effects of complex nanostructures through Young-Laplace equation and finite element analysis. <i>Journal of Applied Physics</i> , 2015 , 118, 204301	2.5	3	
130	Placebo Devices as Effective Control Methods in Acupuncture Clinical Trials: A Systematic Review. <i>PLoS ONE</i> , 2015 , 10, e0140825	3.7	58	
129	Numerical investigation of compressive behaviour of luffa-filled tubes. <i>Composites Part B: Engineering</i> , 2015 , 73, 149-157	10	15	
128	Topology optimization of frequency responses of fluid Structure interaction systems. <i>Finite Elements in Analysis and Design</i> , 2015 , 98, 1-13	2.2	58	
127	Inertia Effect on Buckling-Induced Auxetic Metamaterials. <i>International Journal of Protective Structures</i> , 2015 , 6, 311-322	1.5	5	
126	Topology Optimization of Microstructures for Multi-Functional Graded Composites. <i>Springer Proceedings in Mathematics and Statistics</i> , 2015 , 271-280	0.2		
125	Underground excavation shape optimization considering material nonlinearities. <i>Computers and Geotechnics</i> , 2014 , 58, 81-87	4.4	12	
124	Simple cubic three-dimensional auxetic metamaterials. <i>Physica Status Solidi (B): Basic Research</i> , 2014 , 251, 1515-1522	1.3	83	
123	Improving cracking and drying shrinkage properties of cement mortar by adding chemically treated luffa fibres. <i>Construction and Building Materials</i> , 2014 , 71, 327-333	6.7	26	
122	Evolutionary topology optimization of continuum structures with a global displacement control. <i>CAD Computer Aided Design</i> , 2014 , 56, 58-67	2.9	20	
121	Topology optimization of compliant mechanisms with desired structural stiffness. <i>Engineering Structures</i> , 2014 , 79, 13-21	4.7	39	
120	Designing orthotropic materials for negative or zero compressibility. <i>International Journal of Solids and Structures</i> , 2014 , 51, 4038-4051	3.1	55	
119	Maximizing stiffness of functionally graded materials with prescribed variation of thermal conductivity. <i>Computational Materials Science</i> , 2014 , 82, 457-463	3.2	19	
118	Water-responsive rapid recovery of natural cellular material. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 34, 283-93	4.1	22	
117	Topological design of microstructures of multi-phase materials for maximum stiffness or thermal conductivity. <i>Computational Materials Science</i> , 2014 , 91, 266-273	3.2	29	
116	Application of Topological Optimisation Technology to Bridge Design. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2014 , 24, 185-191	1	6	

115	Examination of surface conditions and other physical properties of commonly used stainless steel acupuncture needles. <i>Acupuncture in Medicine</i> , 2014 , 32, 146-54	1.9	17
114	Design of fishnet metamaterials with broadband negative refractive index in the visible spectrum. <i>Optics Letters</i> , 2014 , 39, 2415-8	3	19
113	Relationship between buckling of acupuncture needles and the handle type. <i>Acupuncture in Medicine</i> , 2014 , 32, 400-5	1.9	4
112	Towards ultra-stiff materials: Surface effects on nanoporous materials. <i>Applied Physics Letters</i> , 2014 , 105, 101903	3.4	9
111	Topology Optimization of Photonic Band Gap Crystals. <i>Applied Mechanics and Materials</i> , 2014 , 553, 824	-829	1
110	New approach to preventing long acupuncture needles from buckling and contamination during insertion. <i>Acupuncture in Medicine</i> , 2014 , 32, 520-2	1.9	2
109	Evolutionary topology optimization of hinge-free compliant mechanisms. <i>International Journal of Mechanical Sciences</i> , 2014 , 86, 69-75	5.5	11
108	Maximizing the effective stiffness of laminate composite materials. <i>Computational Materials Science</i> , 2014 , 83, 57-63	3.2	6
107	Concurrent topology optimization of structures and their composite microstructures. <i>Computers and Structures</i> , 2014 , 133, 103-110	4.5	90
106	Conceptual design of buildings subjected to wind load by using topology optimization. Wind and Structures, an International Journal, 2014, 18, 21-35		7
105	Numerical simulations of wind drags on straight and twisted polygonal buildings. <i>Structural Design of Tall and Special Buildings</i> , 2013 , 22, 62-73	1.8	8
104	Topological optimization for the design of microstructures of isotropic cellular materials. <i>Engineering Optimization</i> , 2013 , 45, 1331-1348	2	59
103	Behaviour of luffa sponge material under dynamic loading. <i>International Journal of Impact Engineering</i> , 2013 , 57, 17-26	4	50
102	Fishnet metamaterial with double negative refractive index in blue region of visible spectrum 2013,		1
101	A Study on Truss Bolt Mechanism in Controlling Stability of Underground Excavation and Cutter Roof Failure. <i>Geotechnical and Geological Engineering</i> , 2013 , 31, 667-682	1.5	8
100	Topology optimization of functionally graded cellular materials. <i>Journal of Materials Science</i> , 2013 , 48, 1503-1510	4.3	109
99	Multi-scale design of composite materials and structures for maximum natural frequencies. <i>Materials & Design</i> , 2013 , 51, 1023-1034		65
98	Comparing optimal material microstructures with optimal periodic structures. <i>Computational Materials Science</i> , 2013 , 69, 137-147	3.2	23

97	Topological optimization design of structures under random excitations using SQP method. Engineering Structures, 2013 , 56, 2098-2106	4.7	31
96	Design of 3D orthotropic materials with prescribed ratios for effective Young moduli. <i>Computational Materials Science</i> , 2013 , 67, 229-237	3.2	28
95	Topology optimization of microstructures of cellular materials and composites for macrostructures. <i>Computational Materials Science</i> , 2013 , 67, 397-407	3.2	118
94	Optimizing two-level hierarchical particles for thin-film solar cells. <i>Optics Express</i> , 2013 , 21 Suppl 2, A28	35 ₃ 9 ₃ 4	11
93	Creating Innovative and Efficient Structures and Materials. <i>Applied Mechanics and Materials</i> , 2013 , 438-439, 439-444	0.3	
92	A Design Procedure for Electric Inductive Capacitive Resonators with Negative Permittivity. <i>Applied Mechanics and Materials</i> , 2013 , 448-453, 2199-2202	0.3	
91	Bi-Directional Evolutionary Structural Optimization for Design of Compliant Mechanisms. <i>Key Engineering Materials</i> , 2013 , 535-536, 373-376	0.4	8
90	Concurrent Design of Structures and Materials Based on the Bi-Directional Evolutionary Structural Optimization. <i>Applied Mechanics and Materials</i> , 2013 , 438-439, 445-450	0.3	3
89	Compressive Behavior of Luffa Sponge Material at High Strain Rate. <i>Key Engineering Materials</i> , 2013 , 535-536, 465-468	0.4	5
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