

Xin Ren

List of Publications by Year in descending order

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Version: 2024-02-01

38
papers

2,827
citations

201674

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345221

36
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38
all docs

38
docs citations

38
times ranked

1011
citing authors

#	ARTICLE	IF	CITATIONS
1	Auxetic metamaterials and structures: a review. <i>Smart Materials and Structures</i> , 2018, 27, 023001.	3.5	657
2	Design, manufacturing and applications of auxetic tubular structures: A review. <i>Thin-Walled Structures</i> , 2021, 163, 107682.	5.3	164
3	Experiments and parametric studies on 3D metallic auxetic metamaterials with tuneable mechanical properties. <i>Smart Materials and Structures</i> , 2015, 24, 095016.	3.5	139
4	Design and characterisation of a tuneable 3D buckling-induced auxetic metamaterial. <i>Materials and Design</i> , 2018, 139, 336-342.	7.0	132
5	Auxetic nail: Design and experimental study. <i>Composite Structures</i> , 2018, 184, 288-298.	5.8	123
6	A simple auxetic tubular structure with tuneable mechanical properties. <i>Smart Materials and Structures</i> , 2016, 25, 065012.	3.5	119
7	Manufacturing, characteristics and applications of auxetic foams: A state-of-the-art review. <i>Composites Part B: Engineering</i> , 2022, 235, 109733.	12.0	111
8	A novel auxetic chiral lattice composite: Experimental and numerical study. <i>Composite Structures</i> , 2022, 282, 115043.	5.8	106
9	Based on auxetic foam: A novel type of seismic metamaterial for Lamb waves. <i>Engineering Structures</i> , 2021, 246, 112976.	5.3	100
10	Mechanical properties of foam-filled hexagonal and re-entrant honeycombs under uniaxial compression. <i>Composite Structures</i> , 2022, 280, 114922.	5.8	96
11	Design and mechanical characteristics of auxetic metamaterial with tunable stiffness. <i>International Journal of Mechanical Sciences</i> , 2022, 223, 107286.	6.7	84
12	A novel buckling-restrained brace with auxetic perforated core: Experimental and numerical studies. <i>Engineering Structures</i> , 2021, 249, 113223.	5.3	83
13	A novel combined auxetic tubular structure with enhanced tunable stiffness. <i>Composites Part B: Engineering</i> , 2021, 226, 109303.	12.0	78
14	Mechanical properties of foam-filled auxetic circular tubes: Experimental and numerical study. <i>Thin-Walled Structures</i> , 2022, 170, 108584.	5.3	74
15	A novel auxetic metamaterial with enhanced mechanical properties and tunable auxeticity. <i>Thin-Walled Structures</i> , 2022, 174, 109162.	5.3	71
16	Mechanical properties of concrete composites with auxetic single and layered honeycomb structures. <i>Construction and Building Materials</i> , 2022, 322, 126453.	7.2	65
17	Tuning the Performance of Metallic Auxetic Metamaterials by Using Buckling and Plasticity. <i>Materials</i> , 2016, 9, 54.	2.9	61
18	A simple 3D re-entrant auxetic metamaterial with enhanced energy absorption. <i>International Journal of Mechanical Sciences</i> , 2022, 229, 107524.	6.7	60

#	ARTICLE	IF	CITATIONS
19	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.	5.0	59
20	Lightweight auxetic metamaterials: Design and characteristic study. <i>Composite Structures</i> , 2022, 293, 115706.	5.8	56
21	A novel type of tubular structure with auxeticity both in radial direction and wall thickness. <i>Thin-Walled Structures</i> , 2021, 163, 107758.	5.3	54
22	A novel auxetic acoustic metamaterial plate with tunable bandgap. <i>International Journal of Mechanical Sciences</i> , 2022, 226, 107414.	6.7	49
23	Design and analysis of an auxetic metamaterial with tuneable stiffness. <i>Composite Structures</i> , 2022, 281, 114997.	5.8	37
24	Theoretical solutions for auxetic laminated beam subjected to a sudden load. <i>Structures</i> , 2020, 28, 57-68.	3.6	36
25	A novel enhanced anti-tetra-missing rib auxetic structure with tailorable in-plane mechanical properties. <i>Engineering Structures</i> , 2022, 262, 114399.	5.3	35
26	A Simple Methodology to Generate Metamaterials and Structures with Negative Poisson's Ratio. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 2000439.	1.5	32
27	In-plane compressive properties of assembled auxetic chiral honeycomb composed of slotted wave plate. <i>Materials and Design</i> , 2022, 221, 110956.	7.0	30
28	A novel re-entrant honeycomb metamaterial with tunable bandgap. <i>Smart Materials and Structures</i> , 2022, 31, 095024.	3.5	24
29	Designing composites with negative linear compressibility. <i>Materials and Design</i> , 2017, 131, 343-357.	7.0	22
30	Numerical Simulations of 3D Metallic Auxetic Metamaterials in both Compression and Tension. <i>Applied Mechanics and Materials</i> , 0, 846, 565-570.	0.2	15
31	Experimental and computational investigations of novel 3D printed square tubular lattice metamaterials with negative Poisson's ratio. <i>Additive Manufacturing</i> , 2022, 55, 102789.	3.0	15
32	Static and dynamic analyses of auxetic hybrid FRC/CNTRC laminated plates. <i>Nanotechnology Reviews</i> , 2020, 9, 1625-1642.	5.8	11
33	Contrastive analysis and crashworthiness optimization of two composite thin-walled structures. <i>Journal of Central South University</i> , 2014, 21, 4386-4394.	3.0	10
34	Geometric Non-Linear Analysis of Auxetic Hybrid Laminated Beams Containing CNT Reinforced Composite Materials. <i>Materials</i> , 2020, 13, 3718.	2.9	9
35	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, .	0.9	4
36	A novel cement-based auxetic foam composite: Experimental study. <i>Case Studies in Construction Materials</i> , 2022, 17, e01159.	1.7	4

#	ARTICLE	IF	CITATIONS
37	The Application Study of Specific Ankle-Foot Orthoses for Stroke Patients by 3D Printing Somos NeXt. Journal of Biomaterials and Tissue Engineering, 2019, 9, 745-750.	0.1	2
38	Design and fabrication of materials and structures with negative Poisson's ratio and negative linear compressibility. , 2017, , .		0