Tian Chen

List of Publications by Citations

20 papers	509 citations	9 h-index	20 g-index
20 ext. papers	710 ext. citations	8.3 avg, IF	4.88 L-index

#	Paper	IF	Citations
20	Harnessing bistability for directional propulsion of soft, untethered robots. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 5698-5702	11.5	171
19	A reprogrammable mechanical metamaterial with stable memory. *Nature*, **2021**, 589, 386-390	50.4	77
18	Integrated Design and Simulation of Tunable, Multi-State Structures Fabricated Monolithically with Multi-Material 3D Printing. *Scientific Reports*, **2017**, 7, 45671	4.9	61
17	Autonomous Deployment of a Solar Panel Using Elastic Origami and Distributed Shape-Memory-Polymer Actuators. *Physical Review Applied*, **2019**, 11,	4.3	51
16	Large Shape Transforming 4D Auxetic Structures. *3D Printing and Additive Manufacturing*, **2017**, 4, 133-142	4	44
15	An Autonomous Programmable Actuator and Shape Reconfigurable Structures Using Bistability and Shape Memory Polymers. *3D Printing and Additive Manufacturing*, **2018**, 5, 91-101	4	31
14	Programmable, active lattice structures: Unifying stretch-dominated and bending-dominated topologies. *Extreme Mechanics Letters*, **2019**, 29, 100461	3.9	23
13	Design and Computational Modeling of a 3D Printed Pneumatic Toolkit for Soft Robotics. *Soft Robotics*, **2019**, 6, 657-663	9.2	16
12	Efficient size and shape optimization of truss structures subject to stress and local buckling constraints using sequential linear programming. *Structural and Multidisciplinary Optimization*, **2018**, 58, 171-184	3.6	9
11	Bistable auxetic surface structures. *ACM Transactions on Graphics*, **2021**, 40, 1-9	7.6	6
10	A 3D, performance-driven generative design framework: automating the link from a 3D spatial grammar interpreter to structural finite element analysis and stochastic optimization. *Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM*, **2018**, 32, 189-199	1.3	5
9	Bending Response of a Book with Internal Friction. *Physical Review Letters*, **2021**, 126, 218004	7.4	5
8	Design and Fabrication of Hierarchical Multi-Stable Structures Through Multi-Material Additive Manufacturing **2016**,		3
7	3D weaving with curved ribbons. *ACM Transactions on Graphics*, **2021**, 40, 1-15	7.6	3
6	Smooth Triaxial Weaving with Naturally Curved Ribbons. *Physical Review Letters*, **2021**, 127, 104301	7.4	2
5	Studying the Impact of Incorporating an Additive Manufacturing Based Design Exercise in a Large, First Year Technical Drawing and CAD Course **2015**,		1
4	Computational design of multi-stable, reconfigurable surfaces. *Materials and Design*, **2021**, 205, 109688	8.1	1

3	3D weaving with curved ribbons. *ACM Transactions on Graphics*, **2021**, 40, 1-15	7.6	0
2	Computational inverse design of surface-based inflatables. *ACM Transactions on Graphics*, **2021**, 40, 1-14	7.6	
1	Bistable auxetic surface structures. *ACM Transactions on Graphics*, **2021**, 40, 1-9	7.6	