Zi Chen

List of Publications by Year
in descending order

100	5,082	147801	95266
papers	citations	31 h-index	68 g-index

103	103	103	8213
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Modeling Physiological Events in 2D vs. 3D Cell Culture. Physiology, 2017, 32, 266-277.	3.1	1,069
2	Dynamic Visualization of Thrombopoiesis Within Bone Marrow. Science, 2007, 317, 1767-1770.	12.6	572
3	Theoretical analysis of the evolution from ignition kernel to flame ball and planar flame. Combustion Theory and Modelling, 2007, 11, 427-453.	1.9	189
4	Neonatal Fc receptor for IgG (FcRn) regulates cross-presentation of IgG immune complexes by CD8^{â^'}CD11b⁺dendritic cells. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9927-9932.	7.1	187
5	Comprehensive circular RNA profiling reveals the regulatory role of the circRNA-100338/miR-141-3p pathway in hepatitis B-related hepatocellular carcinoma. Scientific Reports, 2017, 7, 5428.	3.3	186
6	Design of Nanoparticle-Based Carriers for Targeted Drug Delivery. Journal of Nanomaterials, 2016, 2016, 1-15.	2.7	177
7	Effects of compression and stretch on the determination of laminar flame speeds using propagating spherical flames. Combustion Theory and Modelling, 2009, 13, 343-364.	1.9	148
8	Multifunctional nanoplatforms for subcellular delivery of drugs in cancer therapy. Progress in Materials Science, 2020, 107, 100599.	32.8	138
9	Dimeric Drug Polymeric Micelles with Acidâ€Active Tumor Targeting and FRETâ€Traceable Drug Release. Advanced Materials, 2018, 30, 1705436.	21.0	119
10	Recombinant virus vaccine-induced SIV-specific CD8+ cytotoxic T lymphocytes. Science, 1991, 252, 440-443.	12.6	111
11	Nonlinear Geometric Effects in Mechanical Bistable Morphing Structures. Physical Review Letters, 2012, 109, 114302.	7.8	107
12	Mechanical Self-Assembly of a Strain-Engineered Flexible Layer: Wrinkling, Rolling, and Twisting. Physical Review Applied, 2016, 5, .	3.8	100
13	Fast nastic motion of plants and bioinspired structures. Journal of the Royal Society Interface, 2015, 12, 20150598.	3.4	95
14	Tunable helical ribbons. Applied Physics Letters, 2011, 98, .	3.3	93
15	Flexible piezoelectric nanogenerators using metal-doped ZnO-PVDF films. Sensors and Actuators A: Physical, 2020, 305, 111912.	4.1	91
16	Computational models for mechanics of morphogenesis. Birth Defects Research Part C: Embryo Today Reviews, 2012, 96, 132-152.	3.6	81
17	Carbon nanotube-composite hydrogels promote intercalated disc assembly in engineered cardiac tissues through Î²1-integrin mediated FAK and RhoA pathway. Acta Biomaterialia, 2017, 48, 88-99.	8.3	65
18	Cardiac energy harvesting and sensing based on piezoelectric and triboelectric designs. Nano Energy, 2020, 76, 105076.	16.0	63

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19	Differential p53-Independent Outcomes of p19 ^{Arf} Loss in Oncogenesis. Science Signaling, 2009, 2, ra44.	3.6	58
20	Deterministic Selfâ€Rolling of Ultrathin Nanocrystalline Diamond Nanomembranes for 3D Tubular/Helical Architecture. Advanced Materials, 2017, 29, 1604572.	21.0	57
21	Vibrationâ€Energyâ€Harvesting System: Transduction Mechanisms, Frequency Tuning Techniques, and Biomechanical Applications. Advanced Materials Technologies, 2019, 4, 1900177.	5.8	56
22	A NaCl-regulated plant gene encoding a brain protein homolog that activates ADP ribosyltransferase and inhibits protein kinase C. Plant Journal, 1994, 6, 729-740.	5.7	54
23	Akt Phosphorylates the Transcriptional Repressor Bmi1 to Block Its Effects on the Tumor-Suppressing Ink4a-Arf Locus. Science Signaling, 2012, 5, ra77.	3.6	53
24	In vivo cardiac power generation enabled by an integrated helical piezoelectric pacemaker lead. Nano Energy, 2019, 66, 104085.	16.0	53
25	Shape selection and multi-stability in helical ribbons. Applied Physics Letters, 2014, 104, .	3.3	51
26	Identification of Wee1 as a novel therapeutic target for mutant RAS-driven acute leukemia and other malignancies. Leukemia, 2015, 29, 27-37.	7.2	51
27	Stretchable Kirigami Polyvinylidene Difluoride Thin Films for Energy Harvesting: Design, Analysis, and Performance. Physical Review Applied, 2018, 9, .	3.8	46
28	Photodynamic Therapy With Motexafin Lutetium Induces Redox-Sensitive Apoptosis of Vascular Cells. Arteriosclerosis, Thrombosis, and Vascular Biology, 2001, 21, 759-764.	2.4	43
29	A novel jamming phase diagram links tumor invasion to non-equilibrium phase separation. IScience, 2021, 24, 103252.	4.1	43
30	Flexible Energy Harvester on a Pacemaker Lead Using Multibeam Piezoelectric Composite Thin Films. ACS Applied Materials & Interfaces, 2020, 12, 34170-34179.	8.0	40
31	Helical Structures Mimicking Chiral Seedpod Opening and Tendril Coiling. Sensors, 2018, 18, 2973.	3.8	39
32	Biomechanics of Collective Cell Migration in Cancer Progression: Experimental and Computational Methods. ACS Biomaterials Science and Engineering, 2019, 5, 3766-3787.	5.2	34
33	Flexible Porous Piezoelectric Cantilever on a Pacemaker Lead for Compact Energy Harvesting. Advanced Materials Technologies, 2019, 4, 1800148.	5.8	34
34	Nanocrystallization and magnetic properties of Fe-30 weight percent Ni alloy by surface mechanical attrition treatment. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 1413-1421.	2.2	31
35	Static and dynamic mechanical behaviors of gradient-nanotwinned stainless steel with a composite structure: Experiments and modeling. International Journal of Plasticity, 2019, 114, 272-288.	8.8	30
36	Piezoelectric Buckled Beam Array on a Pacemaker Lead for Energy Harvesting. Advanced Materials Technologies, 2019, 4, 1800335.	5.8	30

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37	A Remotely Controlled Transformable Soft Robot Based on Engineered Cardiac Tissue Construct. Small, 2019, 15, e1900006.	10.0	27
38	Elevated MTSS1 expression associated with metastasis and poor prognosis of residual hepatitis B-related hepatocellular carcinoma. Journal of Experimental and Clinical Cancer Research, 2016, 35, 85.	8.6	26
39	Multifunctional Pacemaker Lead for Cardiac Energy Harvesting and Pressure Sensing. Advanced Healthcare Materials, 2020, 9, e2000053.	7.6	26
40	Magneto-sensitive bistable soft actuators: Experiments, simulations, and applications. Applied Physics Letters, 2018, 113, .	3.3	25
41	Smart Laserâ€Writable Micropatterns with Multiscale Photo/Moisture Reconstructible Structure. Advanced Functional Materials, 2021, 31, 2009481.	14.9	24
42	Spontaneous bending of piezoelectric nanoribbons: Mechanics, polarization, and space charge coupling. Journal of the Mechanics and Physics of Solids, 2010, 58, 73-85.	4.8	23
43	Creation of Faceted Polyhedral Microgels from Compressed Emulsions. Small, 2017, 13, 1701256.	10.0	23
44	Metalâ€“semiconductor Zn/ZnO coreâ€“shell nanocables: facile and large-scale fabrication, growth mechanism, oxidation behavior, and microwave absorption performance. CrystEngComm, 2015, 17, 2806-2814.	2.6	22
45	Shape formation of helical ribbons induced by material anisotropy. Applied Physics Letters, 2017, 110, 091901.	3.3	22
46	Attenuated short wavelength buckling and force propagation in a biopolymer-reinforced rod. Soft Matter, 2013, 9, 194-199.	2.7	20
47	Shape transition and multi-stability of helical ribbons: a finite element method study. Archive of Applied Mechanics, 2015, 85, 331-338.	2.2	20
48	Visualizing intracellular particles and precise control of drug release using an emissive hydrazone photochrome. Chemical Science, 2020, 11, 3016-3021.	7.4	20
49	Tunable, Flexible, and Resilient Robots Driven by an Electrostatic Actuator. Advanced Intelligent Systems, 2020, 2, 1900162.	6.1	20
50	Gaussian-preserved, non-volatile shape morphing in three-dimensional microstructures for dual-functional electronic devices. Nature Communications, 2021, 12, 509.	12.8	19
51	Modeling Bistable behaviors in Morphing Structures through Finite Element Simulations. Bio-Medical Materials and Engineering, 2014, 24, 557-562.	0.6	18
52	Geometric nonlinearity and mechanical anisotropy in strained helical nanoribbons. Nanoscale, 2014, 6, 9443-9447.	5.6	18
53	Implantable Cardiac Kirigamiâ€Inspired Leadâ€Based Energy Harvester Fabricated by Enhanced Piezoelectric Composite Film. Advanced Healthcare Materials, 2021, 10, e2002100.	7.6	18
54	Martensite and its reverse transformation in nanocrystalline bulk Co. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 438-440, 420-426.	5.6	17

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55	Mechanics of tunable helices and geometric frustration in biomimetic seashells. Europhysics Letters, 2014, 105, 64005.	2.0	16
56	A cautionary note on reaction tubes for differential display and cDNA amplification in thermal cycling. BioTechniques, 1994, 16, 1002-4, 1006.	1.8	16
57	PREFACE A SPECIAL SELECTION ON BIOLOGICAL MECHANICS. Journal of Mechanics in Medicine and Biology, 2015, 15, 1502002.	0.7	14
58	Carbon nanotube-based substrates promote cardiogenesis in brown adipose-derived stem cells via β1-integrin-dependent TGF-β1 signaling pathway. International Journal of Nanomedicine, 2016, Volume 11, 4381-4395.	6.7	14
59	Controllable Shape Changing and Tristability of Bilayer Composite. ACS Applied Materials & Interfaces, 2019, 11, 16881-16887.	8.0	14
60	Edge effect of strained bilayer nanofilms for tunable multistability and actuation. Nanoscale, 2017, 9, 2958-2962.	5.6	13
61	Tunable Buckled Beams with Mesoporous PVDF-TrFE/SWCNT Composite Film for Energy Harvesting. ACS Applied Materials & Interfaces, 2018, 10, 33516-33522.	8.0	13
62	Tunable bistability of a clamped elastic beam. Extreme Mechanics Letters, 2020, 34, 100603.	4.1	13
63	Functional Adhesion of Pectin Biopolymers to the Lung Visceral Pleura. Polymers, 2021, 13, 2976.	4.5	13
64	Drug Delivery: Dimeric Drug Polymeric Micelles with Acidâ€Active Tumor Targeting and FRETâ€Traceable Drug Release (Adv. Mater. 3/2018). Advanced Materials, 2018, 30, 1870020.	21.0	12
65	Dislocation climb strengthening in systems with immobile obstacles: Three-dimensional level-set simulation study. Physical Review B, 2010, 81, .	3.2	11
66	Skinâ€like Elastomer Embedded Zinc Oxide Nanoarrays for Biomechanical Energy Harvesting. Advanced Materials Interfaces, 2021, 8, 2100094.	3.7	11
67	Biomaterial-Assisted Anastomotic Healing: Serosal Adhesion of Pectin Films. Polymers, 2021, 13, 2811.	4.5	11
68	FINITE ELEMENT SIMULATIONS ON MECHANICAL SELF-ASSEMBLY OF BIOMIMETIC HELICAL STRUCTURES. Journal of Mechanics in Medicine and Biology, 2013, 13, 1340018.	0.7	10
69	Understanding transport of an elastic, spherical particle through a confining channel. Applied Physics Letters, 2020, 116, .	3.3	9
70	Bistability in popper-like shells programmed by geometric defects. Extreme Mechanics Letters, 2021, 42, 101065.	4.1	9
71	How the embryonic chick brain twists. Journal of the Royal Society Interface, 2016, 13, 20160395.	3.4	8
72	Fabrication of monodisperse magnetic nanorods for improving hyperthermia efficacy. Journal of Nanobiotechnology, 2021, 19, 63.	9.1	8

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73	Extracellular Assembly of the Elastin Cable Line Element in the Developing Lung. Anatomical Record, 2017, 300, 1670-1679.	1.4	7
74	Programmable 3D Selfâ€Folding Structures with Strain Engineering. Advanced Intelligent Systems, 2020, 2, 2000101.	6.1	7
75	The evaluation of reverse shoulder lateralization on deltoid forces and scapular fracture risk: A computational study. Medicine in Novel Technology and Devices, 2021, 11, 100076.	1.6	7
76	What's new about the mechanism of methotrexate action in psoriasis?. British Journal of Dermatology, 2018, 179, 818-819.	1.5	6
77	Energy Harvesting: Flexible Porous Piezoelectric Cantilever on a Pacemaker Lead for Compact Energy Harvesting (Adv. Mater. Technol. 1/2019). Advanced Materials Technologies, 2019, 4, 1970002.	5.8	6
78	Structural evolution and stability of mechanically alloyed Fe-Ni nanocrystalline. Central South University, 2005, 12, 389-392.	0.5	5
79	Residual Stresses and Poissonâ€™s Effect Drive Shape Formation and Transition of Helical Structures. Journal of Elasticity, 2015, 119, 321-333.	1.9	5
80	Voltage-actuated snap-through in bistable piezoelectric thin films: a computational study. Smart Materials and Structures, 2019, 28, 085021.	3.5	5
81	Programmable 3D Selfâ€Folding Structures with Strain Engineering. Advanced Intelligent Systems, 2020, 2, 2070121.	6.1	5
82	Generation, Transmission, and Regulation of Mechanical Forces in Embryonic Morphogenesis. Small, 2021, , 2103466.	10.0	5
83	Optical and Mechanical Properties of Self-Repairing Pectin Biopolymers. Polymers, 2022, 14, 1345.	4.5	5
84	Buckling shape transition of an embedded thin elastic rod after failure of surrounding elastic medium. Extreme Mechanics Letters, 2017, 15, 51-56.	4.1	4
85	Buckling and post-buckling of an elastic rod embedded in a bilayer matrix. Extreme Mechanics Letters, 2018, 25, 1-6.	4.1	3
86	Flexible Electrostatic Transducers for Wearable Haptic Communication*. , 2019, , .		3
87	Comment on shear-rotation mechanism for martensitic transformations. Progress in Natural Science: Materials International, 2004, 14, 917-921.	4.4	2
88	On the determination of shear angle in martensitic transformations. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 457, 380-384.	5.6	2
89	Diamond Nanomembranes: Deterministic Selfâ€Rolling of Ultrathin Nanocrystalline Diamond Nanomembranes for 3D Tubular/Helical Architecture (Adv. Mater. 13/2017). Advanced Materials, 2017, 29, .	21.0	1
90	Missing-in-metastasis B (MIM-B) combined with caveolin-1 promotes metastasis of hepatocellular carcinoma. Oncotarget, 2017, 8, 95450-95465.	1.8	1

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91	Biomechanical Energy Harvester: Skinâ€like Elastomer Embedded Zinc Oxide Nanoarrays for Biomechanical Energy Harvesting (Adv. Mater. Interfaces 10/2021). Advanced Materials Interfaces, 2021, 8, 2170057.	3.7	1
92	Multi-shape-changing interpenetrating networks with shape memory effect and adaptive plastic deformations. Applied Materials Today, 2021, 25, 101246.	4.3	1
93	Engineering shapes and instability in thin structures: Towards self-assembling micro-robots. , 2013, , .		0
94	Residual Stresses and Poissonâ€™s Effect Drive Shape Formation and Transition of Helical Structures. , 2016, , 321-333.		0
95	Probing the Roles of Physical Forces in Early Chick Embryonic Morphogenesis. Journal of Visualized Experiments, 2018, , .	0.3	0
96	Intelligent Biohybrid Robotic Systems: A Remotely Controlled Transformable Soft Robot Based on Engineered Cardiac Tissue Construct (Small 18/2019). Small, 2019, 15, 1970095.	10.0	0
97	Porosity-Tunable Structures with â€œFossilizedâ€•Bubbles. ACS Applied Polymer Materials, 2020, 2, 497-504.	4.4	0
98	Flexible electrostatic transducer array with displacement control for haptic sensing and actuation. Sensors and Actuators A: Physical, 2021, 317, 112452.	4.1	0
99	Kinetics of Plantâ€derived Heteropolysaccharide Bioabsorption Characterized by Fluorescenceâ€based Microfluidics System. FASEB Journal, 2022, 36, .	0.5	0
100	Structural Heteropolysaccharide Adhesion to the Corneal Glycocalyx. FASEB Journal, 2022, 36, .	0.5	0