

# Zi Chen

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/443652/publications.pdf>

Version: 2024-02-01

100  
papers

5,082  
citations

147801

31  
h-index

95266

68  
g-index

103  
all docs

103  
docs citations

103  
times ranked

8213  
citing authors

#	ARTICLE	IF	CITATIONS
1	Optical and Mechanical Properties of Self-Repairing Pectin Biopolymers. <i>Polymers</i> , 2022, 14, 1345.	4.5	5
2	Kinetics of Plantâ€derived Heteropolysaccharide Bioabsorption Characterized by Fluorescenceâ€based Microfluidics System. <i>FASEB Journal</i> , 2022, 36, .	0.5	0
3	Structural Heteropolysaccharide Adhesion to the Corneal Glycocalyx. <i>FASEB Journal</i> , 2022, 36, .	0.5	0
4	Bistability in popper-like shells programmed by geometric defects. <i>Extreme Mechanics Letters</i> , 2021, 42, 101065.	4.1	9
5	Smart Laserâ€Writable Micropatterns with Multiscale Photo/Moisture Reconstructible Structure. <i>Advanced Functional Materials</i> , 2021, 31, 2009481.	14.9	24
6	Flexible electrostatic transducer array with displacement control for haptic sensing and actuation. <i>Sensors and Actuators A: Physical</i> , 2021, 317, 112452.	4.1	0
7	Gaussian-preserved, non-volatile shape morphing in three-dimensional microstructures for dual-functional electronic devices. <i>Nature Communications</i> , 2021, 12, 509.	12.8	19
8	Fabrication of monodisperse magnetic nanorods for improving hyperthermia efficacy. <i>Journal of Nanobiotechnology</i> , 2021, 19, 63.	9.1	8
9	Skinâ€like Elastomer Embedded Zinc Oxide Nanoarrays for Biomechanical Energy Harvesting. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100094.	3.7	11
10	Biomechanical Energy Harvester: Skinâ€like Elastomer Embedded Zinc Oxide Nanoarrays for Biomechanical Energy Harvesting ( <i>Adv. Mater. Interfaces</i> 10/2021). <i>Advanced Materials Interfaces</i> , 2021, 8, 2170057.	3.7	1
11	Biomaterial-Assisted Anastomotic Healing: Serosal Adhesion of Pectin Films. <i>Polymers</i> , 2021, 13, 2811.	4.5	11
12	The evaluation of reverse shoulder lateralization on deltoid forces and scapular fracture risk: A computational study. <i>Medicine in Novel Technology and Devices</i> , 2021, 11, 100076.	1.6	7
13	Functional Adhesion of Pectin Biopolymers to the Lung Visceral Pleura. <i>Polymers</i> , 2021, 13, 2976.	4.5	13
14	Implantable Cardiac Kirigamiâ€Inspired Leadâ€Based Energy Harvester Fabricated by Enhanced Piezoelectric Composite Film. <i>Advanced Healthcare Materials</i> , 2021, 10, e2002100.	7.6	18
15	A novel jamming phase diagram links tumor invasion to non-equilibrium phase separation. <i>IScience</i> , 2021, 24, 103252.	4.1	43
16	Generation, Transmission, and Regulation of Mechanical Forces in Embryonic Morphogenesis. <i>Small</i> , 2021, , 2103466.	10.0	5
17	Multi-shape-changing interpenetrating networks with shape memory effect and adaptive plastic deformations. <i>Applied Materials Today</i> , 2021, 25, 101246.	4.3	1
18	Multifunctional nanoplatfoms for subcellular delivery of drugs in cancer therapy. <i>Progress in Materials Science</i> , 2020, 107, 100599.	32.8	138

#	ARTICLE	IF	CITATIONS
19	Porosity-Tunable Structures with "Fossilized" Bubbles. ACS Applied Polymer Materials, 2020, 2, 497-504.	4.4	0
20	Tunable bistability of a clamped elastic beam. Extreme Mechanics Letters, 2020, 34, 100603.	4.1	13
21	Programmable 3D Self-Folding Structures with Strain Engineering. Advanced Intelligent Systems, 2020, 2, 2000101.	6.1	7
22	Cardiac energy harvesting and sensing based on piezoelectric and triboelectric designs. Nano Energy, 2020, 76, 105076.	16.0	63
23	Flexible Energy Harvester on a Pacemaker Lead Using Multibeam Piezoelectric Composite Thin Films. ACS Applied Materials & Interfaces, 2020, 12, 34170-34179.	8.0	40
24	Understanding transport of an elastic, spherical particle through a confining channel. Applied Physics Letters, 2020, 116, .	3.3	9
25	Flexible piezoelectric nanogenerators using metal-doped ZnO-PVDF films. Sensors and Actuators A: Physical, 2020, 305, 111912.	4.1	91
26	Visualizing intracellular particles and precise control of drug release using an emissive hydrazone photochrome. Chemical Science, 2020, 11, 3016-3021.	7.4	20
27	Tunable, Flexible, and Resilient Robots Driven by an Electrostatic Actuator. Advanced Intelligent Systems, 2020, 2, 1900162.	6.1	20
28	Multifunctional Pacemaker Lead for Cardiac Energy Harvesting and Pressure Sensing. Advanced Healthcare Materials, 2020, 9, e2000053.	7.6	26
29	Programmable 3D Self-Folding Structures with Strain Engineering. Advanced Intelligent Systems, 2020, 2, 2070121.	6.1	5
30	Vibration-Energy-Harvesting System: Transduction Mechanisms, Frequency Tuning Techniques, and Biomechanical Applications. Advanced Materials Technologies, 2019, 4, 1900177.	5.8	56
31	In vivo cardiac power generation enabled by an integrated helical piezoelectric pacemaker lead. Nano Energy, 2019, 66, 104085.	16.0	53
32	Flexible Electrostatic Transducers for Wearable Haptic Communication*. , 2019, , .		3
33	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
34	Biomechanics of Collective Cell Migration in Cancer Progression: Experimental and Computational Methods. ACS Biomaterials Science and Engineering, 2019, 5, 3766-3787.	5.2	34
35	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
36	A Remotely Controlled Transformable Soft Robot Based on Engineered Cardiac Tissue Construct. Small, 2019, 15, e1900006.	10.0	27

#	ARTICLE	IF	CITATIONS
37	Controllable Shape Changing and Tristability of Bilayer Composite. ACS Applied Materials & Interfaces, 2019, 11, 16881-16887.	8.0	14
38	Flexible Porous Piezoelectric Cantilever on a Pacemaker Lead for Compact Energy Harvesting. Advanced Materials Technologies, 2019, 4, 1800148.	5.8	34
39	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
40	Voltage-actuated snap-through in bistable piezoelectric thin films: a computational study. Smart Materials and Structures, 2019, 28, 085021.	3.5	5
41	Piezoelectric Buckled Beam Array on a Pacemaker Lead for Energy Harvesting. Advanced Materials Technologies, 2019, 4, 1800335.	5.8	30
42	Stretchable Kirigami Polyvinylidene Difluoride Thin Films for Energy Harvesting: Design, Analysis, and Performance. Physical Review Applied, 2018, 9, .	3.8	46
43	Drug Delivery: Dimeric Drug Polymeric Micelles with Acid-Active Tumor Targeting and FRET-Traceable Drug Release (Adv. Mater. 3/2018). Advanced Materials, 2018, 30, 1870020.	21.0	12
44	Magneto-sensitive bistable soft actuators: Experiments, simulations, and applications. Applied Physics Letters, 2018, 113, .	3.3	25
45	What's new about the mechanism of methotrexate action in psoriasis?. British Journal of Dermatology, 2018, 179, 818-819.	1.5	6
46	Buckling and post-buckling of an elastic rod embedded in a bilayer matrix. Extreme Mechanics Letters, 2018, 25, 1-6.	4.1	3
47	Tunable Buckled Beams with Mesoporous PVDF-TrFE/SWCNT Composite Film for Energy Harvesting. ACS Applied Materials & Interfaces, 2018, 10, 33516-33522.	8.0	13
48	Helical Structures Mimicking Chiral Seedpod Opening and Tendril Coiling. Sensors, 2018, 18, 2973.	3.8	39
49	Probing the Roles of Physical Forces in Early Chick Embryonic Morphogenesis. Journal of Visualized Experiments, 2018, , .	0.3	0
50	Dimeric Drug Polymeric Micelles with Acid-Active Tumor Targeting and FRET-Traceable Drug Release. Advanced Materials, 2018, 30, 1705436.	21.0	119
51	Shape formation of helical ribbons induced by material anisotropy. Applied Physics Letters, 2017, 110, 091901.	3.3	22
52	Deterministic Self-Rolling of Ultrathin Nanocrystalline Diamond Nanomembranes for 3D Tubular/Helical Architecture. Advanced Materials, 2017, 29, 1604572.	21.0	57
53	Modeling Physiological Events in 2D vs. 3D Cell Culture. Physiology, 2017, 32, 266-277.	3.1	1,069
54	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

#	ARTICLE	IF	CITATIONS
55	Extracellular Assembly of the Elastin Cable Line Element in the Developing Lung. <i>Anatomical Record</i> , 2017, 300, 1670-1679.	1.4	7
56	Diamond Nanomembranes: Deterministic Self-Rolling of Ultrathin Nanocrystalline Diamond Nanomembranes for 3D Tubular/Helical Architecture ( <i>Adv. Mater.</i> 13/2017). <i>Advanced Materials</i> , 2017, 29, .	21.0	1
57	Edge effect of strained bilayer nanofilms for tunable multistability and actuation. <i>Nanoscale</i> , 2017, 9, 2958-2962.	5.6	13
58	Comprehensive circular RNA profiling reveals the regulatory role of the circRNA-100338/miR-141-3p pathway in hepatitis B-related hepatocellular carcinoma. <i>Scientific Reports</i> , 2017, 7, 5428.	3.3	186
59	Creation of Faceted Polyhedral Microgels from Compressed Emulsions. <i>Small</i> , 2017, 13, 1701256.	10.0	23
60	Carbon nanotube-composite hydrogels promote intercalated disc assembly in engineered cardiac tissues through $\beta$ 1-integrin mediated FAK and RhoA pathway. <i>Acta Biomaterialia</i> , 2017, 48, 88-99.	8.3	65
61	Missing-in-metastasis B (MIM-B) combined with caveolin-1 promotes metastasis of hepatocellular carcinoma. <i>Oncotarget</i> , 2017, 8, 95450-95465.	1.8	1
62	Design of Nanoparticle-Based Carriers for Targeted Drug Delivery. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-15.	2.7	177
63	Carbon nanotube-based substrates promote cardiogenesis in brown adipose-derived stem cells via $\beta$ 1-integrin-dependent TGF- $\beta$ 1 signaling pathway. <i>International Journal of Nanomedicine</i> , 2016, Volume 11, 4381-4395.	6.7	14
64	How the embryonic chick brain twists. <i>Journal of the Royal Society Interface</i> , 2016, 13, 20160395.	3.4	8
65	Elevated MTSS1 expression associated with metastasis and poor prognosis of residual hepatitis B-related hepatocellular carcinoma. <i>Journal of Experimental and Clinical Cancer Research</i> , 2016, 35, 85.	8.6	26
66	Mechanical Self-Assembly of a Strain-Engineered Flexible Layer: Wrinkling, Rolling, and Twisting. <i>Physical Review Applied</i> , 2016, 5, .	3.8	100
67	Residual Stresses and Poisson's Effect Drive Shape Formation and Transition of Helical Structures. , 2016, , 321-333.		0
68	Fast nastic motion of plants and bioinspired structures. <i>Journal of the Royal Society Interface</i> , 2015, 12, 20150598.	3.4	95
69	PREFACE A SPECIAL SELECTION ON BIOLOGICAL MECHANICS. <i>Journal of Mechanics in Medicine and Biology</i> , 2015, 15, 1502002.	0.7	14
70	Metal-semiconductor Zn/ZnO core-shell nanocables: facile and large-scale fabrication, growth mechanism, oxidation behavior, and microwave absorption performance. <i>CrystEngComm</i> , 2015, 17, 2806-2814.	2.6	22
71	Residual Stresses and Poisson's Effect Drive Shape Formation and Transition of Helical Structures. <i>Journal of Elasticity</i> , 2015, 119, 321-333.	1.9	5
72	Shape transition and multi-stability of helical ribbons: a finite element method study. <i>Archive of Applied Mechanics</i> , 2015, 85, 331-338.	2.2	20

#	ARTICLE	IF	CITATIONS
73	Identification of Wee1 as a novel therapeutic target for mutant RAS-driven acute leukemia and other malignancies. <i>Leukemia</i> , 2015, 29, 27-37.	7.2	51
74	Mechanics of tunable helices and geometric frustration in biomimetic seashells. <i>Europhysics Letters</i> , 2014, 105, 64005.	2.0	16
75	Shape selection and multi-stability in helical ribbons. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	51
76	Modeling Bistable behaviors in Morphing Structures through Finite Element Simulations. <i>Bio-Medical Materials and Engineering</i> , 2014, 24, 557-562.	0.6	18
77	Geometric nonlinearity and mechanical anisotropy in strained helical nanoribbons. <i>Nanoscale</i> , 2014, 6, 9443-9447.	5.6	18
78	Engineering shapes and instability in thin structures: Towards self-assembling micro-robots. , 2013, , .		0
79	Attenuated short wavelength buckling and force propagation in a biopolymer-reinforced rod. <i>Soft Matter</i> , 2013, 9, 194-199.	2.7	20
80	FINITE ELEMENT SIMULATIONS ON MECHANICAL SELF-ASSEMBLY OF BIOMIMETIC HELICAL STRUCTURES. <i>Journal of Mechanics in Medicine and Biology</i> , 2013, 13, 1340018.	0.7	10
81	Nonlinear Geometric Effects in Mechanical Bistable Morphing Structures. <i>Physical Review Letters</i> , 2012, 109, 114302.	7.8	107
82	Akt Phosphorylates the Transcriptional Repressor Bmi1 to Block Its Effects on the Tumor-Suppressing <i>Ink4a-Arf</i> Locus. <i>Science Signaling</i> , 2012, 5, ra77.	3.6	53
83	Computational models for mechanics of morphogenesis. <i>Birth Defects Research Part C: Embryo Today Reviews</i> , 2012, 96, 132-152.	3.6	81
84	Tunable helical ribbons. <i>Applied Physics Letters</i> , 2011, 98, .	3.3	93
85	Neonatal Fc receptor for IgG (FcRn) regulates cross-presentation of IgG immune complexes by CD8 <sup>+</sup> CD11b <sup>+</sup> dendritic cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 9927-9932.	7.1	187
86	Spontaneous bending of piezoelectric nanoribbons: Mechanics, polarization, and space charge coupling. <i>Journal of the Mechanics and Physics of Solids</i> , 2010, 58, 73-85.	4.8	23
87	Dislocation climb strengthening in systems with immobile obstacles: Three-dimensional level-set simulation study. <i>Physical Review B</i> , 2010, 81, .	3.2	11
88	Effects of compression and stretch on the determination of laminar flame speeds using propagating spherical flames. <i>Combustion Theory and Modelling</i> , 2009, 13, 343-364.	1.9	148
89	Differential p53-Independent Outcomes of p19 <sup>Arf</sup> Loss in Oncogenesis. <i>Science Signaling</i> , 2009, 2, ra44.	3.6	58
90	Dynamic Visualization of Thrombopoiesis Within Bone Marrow. <i>Science</i> , 2007, 317, 1767-1770.	12.6	572

#	ARTICLE	IF	CITATIONS
91	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
92	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
93	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
94	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
95	Structural evolution and stability of mechanically alloyed Fe-Ni nanocrystalline. Central South University, 2005, 12, 389-392.	0.5	5
96	Comment on shear-rotation mechanism for martensitic transformations. Progress in Natural Science: Materials International, 2004, 14, 917-921.	4.4	2
97	Photodynamic Therapy With Motexafin Lutetium Induces Redox-Sensitive Apoptosis of Vascular Cells. Arteriosclerosis, Thrombosis, and Vascular Biology, 2001, 21, 759-764.	2.4	43
98	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
99	A cautionary note on reaction tubes for differential display and cDNA amplification in thermal cycling. BioTechniques, 1994, 16, 1002-4, 1006.	1.8	16
100	Recombinant virus vaccine-induced SIV-specific CD8+ cytotoxic T lymphocytes. Science, 1991, 252, 440-443.	12.6	111