

Shuodao Wang

List of Publications by Year in descending order

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57
papers

10,195
citations

159585

30
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175258

52
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59
all docs

59
docs citations

59
times ranked

11929
citing authors

#	ARTICLE	IF	CITATIONS
1	Machine learning based inverse modeling of full-field strain distribution for mechanical characterization of a linear elastic and heterogeneous membrane. <i>Mechanics of Materials</i> , 2022, 165, 104134.	3.2	1
2	Theoretical predictions and evolutions of wrinkles in the film-intermediate layer-substrate structure under compression. <i>International Journal of Solids and Structures</i> , 2022, 250, 111699.	2.7	4
3	Efficacy of a Design Silastic Elastomer Intrauterine Device as a Horse Contraceptive. <i>Journal of Wildlife Management</i> , 2021, 85, 1169-1174.	1.8	4
4	Effects of thermo-magneto-electro nonlinearity characteristics on the stability of functionally graded piezoelectric beam. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2020, 41, 313-326.	3.6	6
5	Mechanics of Regular-Shape Nanomeshes for Transparent and Stretchable Devices. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2020, 87, .	2.2	4
6	Electrochemically triggered degradation of silicon membranes for smart on-demand transient electronic devices. <i>Nanotechnology</i> , 2019, 30, 394002.	2.6	10
7	Nanomeshed Si nanomembranes. <i>Npj Flexible Electronics</i> , 2019, 3, .	10.7	12
8	A unified procedure for free transverse vibration of rectangular and annular sectorial plates. <i>Archive of Applied Mechanics</i> , 2019, 89, 1485-1499.	2.2	4
9	Vibration analysis of nanorods by the Rayleigh-Ritz method and truncated Fourier series. <i>Results in Physics</i> , 2019, 12, 327-334.	4.1	9
10	Mechanics of Periodic Film Cracking in Bilayer Structures Under Stretching. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2018, 85, .	2.2	4
11	Flexible, Stretchable, and Biodegradable Thin-Film Silicon Photovoltaics. , 2018, , 161-175.		1
12	Third-order polynomial model for analyzing stickup state laminated structure in flexible electronics. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2018, 34, 48-61.	3.4	4
13	Stretchable Electronics: In-Plane Deformation Mechanics for Highly Stretchable Electronics (Adv.) <i>Tj ETQq1 1 0.784314 rgBJ /Overl</i> 21.0	21.0	5
14	Wrinkling of Tympanic Membrane Under Unbalanced Pressure. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2017, 84, 0410021-410026.	2.2	5
15	An Improved Fourier-Ritz Method for Analyzing In-Plane Free Vibration of Sectorial Plates. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2017, 84, .	2.2	8
16	Theoretical and experimental study of 2D conformability of stretchable electronics laminated onto skin. <i>Science China Technological Sciences</i> , 2017, 60, 1415-1422.	4.0	31
17	Analytical study of wrinkling in thin-film-on-elastomer system with finite substrate thickness. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2017, 38, 469-478.	3.6	2
18	In-Plane Deformation Mechanics for Highly Stretchable Electronics. <i>Advanced Materials</i> , 2017, 29, 1604989.	21.0	141

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19	Buckling analysis in stretchable electronics. Npj Flexible Electronics, 2017, 1, .	10.7	57
20	A generalized solution procedure for in-plane free vibration of rectangular plates and annular sectorial plates. Royal Society Open Science, 2017, 4, 170484.	2.4	10
21	Adhesion-governed buckling of thin-film electronics on soft tissues. Theoretical and Applied Mechanics Letters, 2016, 6, 6-10.	2.8	14
22	Mechanically Reinforced Skin-€Electronics with Networked Nanocomposite Elastomer. Advanced Materials, 2016, 28, 10257-10265.	21.0	108
23	Transfer printing of fully formed thin-film microscale GaAs lasers on silicon with a thermally conductive interface material. Laser and Photonics Reviews, 2015, 9, L17.	8.7	36
24	Solar Cells: Device Architectures for Enhanced Photon Recycling in Thin-Film Multijunction Solar Cells (Adv. Energy Mater. 1/2015). Advanced Energy Materials, 2015, 5, n/a-n/a.	19.5	0
25	Mechanical Designs for Inorganic Stretchable Circuits in Soft Electronics. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2015, 5, 1201-1218.	2.5	61
26	Elasticity of Fractal Inspired Interconnects. Small, 2015, 11, 367-373.	10.0	84
27	Device Architectures for Enhanced Photon Recycling in Thin-film Multijunction Solar Cells. Advanced Energy Materials, 2015, 5, 1400919.	19.5	41
28	Mechanics of Interfacial Delamination in Epidermal Electronics Systems. Journal of Applied Mechanics, Transactions ASME, 2014, 81, .	2.2	46
29	Mechanics of stretchable electronics on balloon catheter under extreme deformation. International Journal of Solids and Structures, 2014, 51, 1555-1561.	2.7	28
30	Printing-based assembly of quadruple-junction four-terminal microscale solar cells and their use in high-efficiency modules. Nature Materials, 2014, 13, 593-598.	27.5	143
31	High efficiency quadruple junction, four-terminal solar cells and modules by transfer printing. , 2014, , .		0
32	Adaptive optoelectronic camouflage systems with designs inspired by cephalopod skins. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12998-13003.	7.1	197
33	Experimental and Theoretical Studies of Serpentine Microstructures Bonded To Prestrained Elastomers for Stretchable Electronics. Advanced Functional Materials, 2014, 24, 2028-2037.	14.9	273
34	Printed high-efficiency quadruple-junction, four-terminal solar cells and modules for full spectrum utilization. , 2014, , .		0
35	Deformable, Programmable, and Shape-€Memorizing Micro-€Optics. Advanced Functional Materials, 2013, 23, 3299-3306.	14.9	199
36	Multifunctional Epidermal Electronics Printed Directly Onto the Skin. Advanced Materials, 2013, 25, 2773-2778.	21.0	714

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37	Multi-Functional Electronics: Multifunctional Epidermal Electronics Printed Directly Onto the Skin (Adv. Mater. 20/2013). Advanced Materials, 2013, 25, 2772-2772.	21.0	16
38	Shape-Memory Polymers: Deformable, Programmable, and Shape-Memorizing Micro-Optics (Adv. Funct. Mater. 2010, 10, 1991-1998) / Overlaid	14.9	8
39	Mechanics of Epidermal Electronics. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	2.2	161
40	Electronic sensor and actuator webs for large-area complex geometry cardiac mapping and therapy. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19910-19915.	7.1	209
41	Thin, Flexible Sensors and Actuators as "Instrumented" Surgical Sutures for Targeted Wound Monitoring and Therapy. Small, 2012, 8, 3263-3268.	10.0	141
42	Theory for Stretchable Interconnects. , 2012, , 1-29.		2
43	Active, Programmable Elastomeric Surfaces with Tunable Adhesion for Deterministic Assembly by Transfer Printing. Advanced Functional Materials, 2012, 22, 4476-4484.	14.9	135
44	Three-dimensional nanonetworks for giant stretchability in dielectrics and conductors. Nature Communications, 2012, 3, 916.	12.8	292
45	Epidermal Electronics. Science, 2011, 333, 838-843.	12.6	3,944
46	Ultrathin silicon solar microcells for semitransparent, mechanically flexible and microconcentrator module designs. , 2010, , 38-46.		2
47	Micromechanics and Advanced Designs for Curved Photodetector Arrays in Hemispherical Electronic "Eye Cameras. Small, 2010, 6, 851-856.	10.0	94
48	Compact monocrystalline silicon solar modules with high voltage outputs and mechanically flexible designs. Energy and Environmental Science, 2010, 3, 208.	30.8	65
49	Mechanics of curvilinear electronics. Soft Matter, 2010, 6, 5757.	2.7	74
50	Kinetically controlled, adhesiveless transfer printing using microstructured stamps. Applied Physics Letters, 2009, 94, .	3.3	92
51	Mechanics of hemispherical electronics. Applied Physics Letters, 2009, 95, 181912.	3.3	19
52	Mechanics of noncoplanar mesh design for stretchable electronic circuits. Journal of Applied Physics, 2009, 105, .	2.5	143
53	Curvilinear Electronics Formed Using Silicon Membrane Circuits and Elastomeric Transfer Elements. Small, 2009, 5, 2703-2709.	10.0	233
54	Theoretical and Experimental Studies of Bending of Inorganic Electronic Materials on Plastic Substrates. Advanced Functional Materials, 2008, 18, 2673-2684.	14.9	398

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55	A hemispherical electronic eye camera based on compressible silicon optoelectronics. Nature, 2008, 454, 748-753.	27.8	1,211
56	Ultrathin silicon solar microcells for semitransparent, mechanically flexible and microconcentrator module designs. Nature Materials, 2008, 7, 907-915.	27.5	615
57	Local versus global buckling of thin films on elastomeric substrates. Applied Physics Letters, 2008, 93, .	3.3	73