Jianliang Xiao

List of Publications by Year
in descending order

67 papers	9,010 citations	109321 35 h-index	98798 67 g-index
69 all docs	69 docs citations	69 times ranked	11334 citing authors

#	Article	IF	Citations
1	E-skin: the future of sustainable & recyclable wearable electronics. TheScienceBreaker, 2022, 8, .	0.0	1
2	Selfâ€Cooling Galliumâ€Based Transformative Electronics with a Radiative Cooler for Reliable Stiffness Tuning in Outdoor Use. Advanced Science, 2022, 9, .	11.2	17
3	High-performance wearable thermoelectric generator with self-healing, recycling, and Lego-like reconfiguring capabilities. Science Advances, 2021, 7, .	10.3	189
4	Recyclable, Healable, and Stretchable Highâ€Power Thermoelectric Generator. Advanced Energy Materials, 2021, 11, 2100920.	19.5	65
5	Biomimetic Prosthetic Hand Enabled by Liquid Crystal Elastomer Tendons. Micromachines, 2021, 12, 736.	2.9	13
6	Curvy, shape-adaptive imagers based on printed optoelectronic pixels with a kirigami design. Nature Electronics, 2021, 4, 513-521.	26.0	87
7	Stretchable, Rehealable, Recyclable, and Reconfigurable Integrated Strain Sensor for Joint Motion and Respiration Monitoring. Research, 2021, 2021, 9846036.	5.7	19
8	Confined thin film wrinkling on shape memory polymer with hybrid surface morphologies. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 1063-1071.	3.4	3
9	Highly stretchable and rehealable wearable strain sensor based on dynamic covalent thermoset and liquid metal. Smart Materials and Structures, 2021, 30, 105001.	3.5	9
10	Fabrication and Characterization of Highly Deformable Artificial Muscle Fibers Based on Liquid Crystal Elastomers. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	2.2	6
11	Optogenetic Probes: Rapidly Customizable, Scalable 3Dâ€Printed Wireless Optogenetic Probes for Versatile Applications in Neuroscience (Adv. Funct. Mater. 46/2020). Advanced Functional Materials, 2020, 30, 2070305.	14.9	0
12	Rapidly Customizable, Scalable 3Dâ€Printed Wireless Optogenetic Probes for Versatile Applications in Neuroscience. Advanced Functional Materials, 2020, 30, 2004285.	14.9	18
13	Air/water interfacial assembled rubbery semiconducting nanofilm for fully rubbery integrated electronics. Science Advances, 2020, 6, .	10.3	54
14	Homogeneity Permitted Robust Connection for Additive Manufacturing Stretchable Electronics. ACS Applied Materials & Interfaces, 2020, 12, 43152-43159.	8.0	6
15	Heterogeneous integration of rigid, soft, and liquid materials for self-healable, recyclable, and reconfigurable wearable electronics. Science Advances, 2020, 6, .	10.3	118
16	Ultralow-Cost, Highly Sensitive, and Flexible Pressure Sensors Based on Carbon Black and Airlaid Paper for Wearable Electronics. ACS Applied Materials & Interfaces, 2019, 11, 33370-33379.	8.0	127
17	Metal oxide semiconductor nanomembraneâ€“based soft unnoticeable multifunctional electronics for wearable human-machine interfaces. Science Advances, 2019, 5, eaav9653.	10.3	213
18	Wireless optofluidic brain probes for chronic neuropharmacology and photostimulation. Nature Biomedical Engineering, 2019, 3, 655-669.	22.5	88

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19	Mechanically transformative electronics, sensors, and implantable devices. Science Advances, 2019, 5, eaay0418.	10.3	129
20	Improved design of highly efficient microsized lithium-ion batteries for stretchable electronics. Journal of Micromechanics and Microengineering, 2019, 29, 075008.	2.6	5
21	Investigating the Self-Healing of Dynamic Covalent Thermoset Polyimine and Its Nanocomposites. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	2.2	7
22	Tunable surface wrinkling on shape memory polymers with application in smart micromirror. Applied Physics Letters, 2019, 114, 193701.	3.3	14
23	Wrinkling of silicon nanoribbons on shape memory polymers. Journal Physics D: Applied Physics, 2019, 52, 265101.	2.8	4
24	Superamphiphobic Porous Structure: Design and Implementation. Advanced Materials Interfaces, 2019, 6, 1801973.	3.7	5
25	Three-dimensional curvy electronics created using conformal additive stamp printing. Nature Electronics, 2019, 2, 471-479.	26.0	131
26	Synchronous enhancement and stabilization of graphene oxide liquid crystals: Inductive effect of sodium alginates in different concentration zones. Polymer, 2019, 160, 107-114.	3.8	19
27	Simultaneous formation of multiscale hierarchical surface morphologies through sequential wrinkling and folding. Applied Physics Letters, 2018, 112, .	3.3	8
28	A flyweight and superelastic graphene aerogel as a high-capacity adsorbent and highly sensitive pressure sensor. Journal of Materials Chemistry A, 2018, 6, 9074-9080.	10.3	114
29	Rehealable, fully recyclable, and malleable electronic skin enabled by dynamic covalent thermoset nanocomposite. Science Advances, 2018, 4, eaaq0508.	10.3	375
30	Graphene/nanofiber aerogels: Performance regulation towards multiple applications in dye adsorption and oil/water separation. Chemical Engineering Journal, 2018, 338, 202-210.	12.7	198
31	Miniaturized, Batteryâ€Free Optofluidic Systems with Potential for Wireless Pharmacology and Optogenetics. Small, 2018, 14, 1702479.	10.0	91
32	Direction-dependent stretchability of AgNW electrodes on microprism-mediated elastomeric substrates. AIP Advances, 2018, 8, 065227.	1.3	1
33	Programmable localized wrinkling of thin films on shape memory polymers with application in nonuniform optical gratings. Applied Physics Letters, 2018, 112, .	3.3	11
34	Revealing the three-dimensional filler structure in a rubber matrix based on fluorescein modified layered double hydroxides. RSC Advances, 2017, 7, 4030-4038.	3.6	6
35	l-cysteine-reduced graphene oxide/poly(vinyl alcohol) ultralight aerogel as a broad-spectrum adsorbent for anionic and cationic dyes. Journal of Materials Science, 2017, 52, 5807-5821.	3.7	47
36	Characterization and photocatalytic properties of SiO 2 â€“TiO 2 nanocomposites prepared through gaseous detonation method. Ceramics International, 2017, 43, 9377-9381.	4.8	16

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37	3D Multiscale Superhydrophilic Sponges with Delicately Designed Pore Size for Ultrafast Oil/Water Separation. Advanced Functional Materials, 2017, 27, 1704293.	14.9	199
38	Temperature dependent evolution of wrinkled single-crystal silicon ribbons on shape memory polymers. Soft Matter, 2017, 13, 7625-7632.	2.7	12
39	Scalable Manufacturing of Solderable and Stretchable Physiologic Sensing Systems. Advanced Materials, 2017, 29, 1701312.	21.0	49
40	Multifunctional graphene/poly(vinyl alcohol) aerogels: In situ hydrothermal preparation and applications in broad-spectrum adsorption for dyes and oils. Carbon, 2017, 123, 354-363.	10.3	89
41	Harnessing Surface Wrinklingâ€“Cracking Patterns for Tunable Optical Transmittance. Advanced Optical Materials, 2017, 5, 1700425.	7.3	76
42	A general strategy for the synthesis of layered double hydroxide nanoscrolls on arbitrary substrates: its formation and multifunction. Journal of Materials Chemistry A, 2017, 5, 19079-19090.	10.3	23
43	Programmable, reversible and repeatable wrinkling of shape memory polymer thin films on elastomeric substrates for smart adhesion. Soft Matter, 2017, 13, 5317-5323.	2.7	29
44	Environmentally friendly reduced graphene oxide as a broad-spectrum adsorbent for anionic and cationic dyes via Ï€â€“Ï€ interactions. Journal of Materials Chemistry A, 2016, 4, 12126-12135.	10.3	210
45	Third-Order Polynomials Model for Analyzing Multilayer Hard/Soft Materials in Flexible Electronics. Journal of Applied Mechanics, Transactions ASME, 2016, 83, .	2.2	16
46	Stretchable Thin Film Materials: Fabrication, Application, and Mechanics. Journal of Electronic Packaging, Transactions of the ASME, 2016, 138, .	1.8	68
47	Influences of Substrate Adhesion and Particle Size on the Shape Memory Effect of Polystyrene Particles. Langmuir, 2016, 32, 3691-3698.	3.5	35
48	Simultaneous regulation of morphology, crystallization, thermal stability and adsorbability of electrospun polyamide 6 nanofibers via graphene oxide and chemically reduced graphene oxide. RSC Advances, 2016, 6, 41392-41403.	3.6	10
49	Epidermal mechano-acoustic sensing electronics for cardiovascular diagnostics and human-machine interfaces. Science Advances, 2016, 2, e1601185.	10.3	310
50	Interaction between Poly(vinyl alcohol) and Layered Double Hydroxide (LDH) Particles with Different Topological Shape and Their Application in Electrospinning. Journal of Physical Chemistry C, 2016, 120, 14435-14443.	3.1	14
51	Mechanics of bioinspired imaging systems. Theoretical and Applied Mechanics Letters, 2016, 6, 11-20.	2.8	20
52	Observations of stress accumulation and relaxation in solidâ€state lithiation and delithiation of suspended Si microcantilevers. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2156-2168.	1.8	7
53	Mechanics of curvilinear electronics and optoelectronics. Current Opinion in Solid State and Materials Science, 2015, 19, 171-189.	11.5	36
54	Morphing Metalâ€“Polymer Janus Particles. Advanced Materials, 2014, 26, 899-904.	21.0	36

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55	Compliant, Heterogeneously Integrated GaAs Microâ€VCSELs towards Wearable and Implantable Integrated Optoelectronics Platforms. Advanced Optical Materials, 2014, 2, 373-381.	7.3	29
56	Digital cameras with designs inspired by the arthropod eye. Nature, 2013, 497, 95-99.	27.8	926
57	Grafting of copolymers onto graphene by miniemulsion polymerization for conductive polymer composites: improved electrical conductivity and compatibility induced by interfacial distribution of graphene. Polymer Chemistry, 2013, 4, 2939.	3.9	93
58	Surface effects on in-plane buckling of nanowires on elastomeric substrates. Journal Physics D: Applied Physics, 2013, 46, 125309.	2.8	20
59	Mechanics of Tunable Hemispherical Electronic Eye Camera Systems That Combine Rigid Device Elements With Soft Elastomers. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	2.2	38
60	Dynamically tunable hemispherical electronic eye camera system with adjustable zoom capability. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1788-1793.	7.1	242
61	Stretchable, Curvilinear Electronics Based on Inorganic Materials. Advanced Materials, 2010, 22, 2108-2124.	21.0	525
62	Dissolvable films of silk fibroin for ultrathin conformal bio-integrated electronics. Nature Materials, 2010, 9, 511-517.	27.5	1,501
63	Waterproof AlInGaP optoelectronics on stretchable substrates with applications in biomedicine andÂrobotics. Nature Materials, 2010, 9, 929-937.	27.5	557
64	Lateral Buckling Mechanics in Silicon Nanowires on Elastomeric Substrates. Nano Letters, 2009, 9, 3214-3219.	9.1	118
65	Finite width effect of thin-films buckling on compliant substrate: Experimental and theoretical studies. Journal of the Mechanics and Physics of Solids, 2008, 56, 2585-2598.	4.8	110
66	A hemispherical electronic eye camera based on compressible silicon optoelectronics. Nature, 2008, 454, 748-753.	27.8	1,211
67	Molecular Scale Buckling Mechanics in Individual Aligned Single-Wall Carbon Nanotubes on Elastomeric Substrates. Nano Letters, 2008, 8, 124-130.	9.1	180