Lan Liu

List of Publications by Year
in descending order

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48 papers	2,881 citations	201385 27 h-index	205818 48 g-index
49 all docs	49 docs citations	49 times ranked	3882 citing authors

#	Article	IF	Citations
1	Ultrasensitive Cracking-Assisted Strain Sensors Based on Silver Nanowires/Graphene Hybrid Particles. ACS Applied Materials & Interfaces, 2016, 8, 25563-25570.	4.0	223
2	A highly stretchable and sensitive strain sensor based on grapheneâ€“elastomer composites with a novel double-interconnected network. Journal of Materials Chemistry C, 2016, 4, 6345-6352.	2.7	216
3	A highly stretchable strain sensor based on a graphene/silver nanoparticle synergic conductive network and a sandwich structure. Journal of Materials Chemistry C, 2016, 4, 4304-4311.	2.7	207
4	A compliant, self-adhesive and self-healing wearable hydrogel as epidermal strain sensor. Journal of Materials Chemistry C, 2018, 6, 4183-4190.	2.7	163
5	Cuâ€“Ag coreâ€“shell nanowires for electronic skin with a petal molded microstructure. Journal of Materials Chemistry C, 2015, 3, 9594-9602.	2.7	160
6	Channel Crack-Designed Gold@PU Sponge for Highly Elastic Piezoresistive Sensor with Excellent Detectability. ACS Applied Materials & Interfaces, 2017, 9, 20098-20105.	4.0	154
7	Multiscale Wrinkled Microstructures for Piezoresistive Fibers. Advanced Functional Materials, 2016, 26, 5078-5085.	7.8	146
8	Silver nanowires coated on cotton for flexible pressure sensors. Journal of Materials Chemistry C, 2016, 4, 935-943.	2.7	130
9	Highly Stable and Sensitive Paper-Based Bending Sensor Using Silver Nanowires/Layered Double Hydroxides Hybrids. ACS Applied Materials & Interfaces, 2015, 7, 14182-14191.	4.0	120
10	Grapheneâ€“Elastomer Composites with Segregated Nanostructured Network for Liquid and Strain Sensing Application. ACS Applied Materials & Interfaces, 2016, 8, 24143-24151.	4.0	120
11	Flexible piezoresistive sensors based on â€œdynamic bridging effectâ€•of silver nanowires toward graphene. Carbon, 2017, 113, 395-403.	5.4	108
12	Liquid metal fiber composed of a tubular channel as a high-performance strain sensor. Journal of Materials Chemistry C, 2017, 5, 12483-12491.	2.7	94
13	Transparent and Waterproof Ionic Liquid-Based Fibers for Highly Durable Multifunctional Sensors and Strain-Insensitive Stretchable Conductors. ACS Applied Materials & Interfaces, 2018, 10, 4305-4314.	4.0	85
14	Highly stretchable fiber-shaped e-textiles for strain/pressure sensing, full-range human motions detection, health monitoring, and 2D force mapping. Journal of Materials Science, 2018, 53, 2995-3005.	1.7	70
15	A Novel Conductive Coreâ€“Shell Particle Based on Liquid Metal for Fabricating Realâ€Time Selfâ€Repairing Flexible Circuits. Advanced Functional Materials, 2020, 30, 1910524.	7.8	64
16	Ultrasensitive and Highly Stretchable Multifunctional Strain Sensors with Timbreâ€Recognition Ability Based on Vertical Graphene. Advanced Functional Materials, 2019, 29, 1907151.	7.8	59
17	Preparation, structure and properties of nitrileâ€“butadiene rubberâ€“organoclay nanocomposites by reactive mixing intercalation method. Journal of Applied Polymer Science, 2006, 100, 1905-1913.	1.3	58
18	A new approach to construct three dimensional segregated graphene structures in rubber composites for enhanced conductive, mechanical and barrier properties. Journal of Materials Chemistry C, 2016, 4, 2353-2358.	2.7	58

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19	Topologically Enhanced Dual-Network Hydrogels with Rapid Recovery for Low-Hysteresis, Self-Adhesive Epidemic Electronics. ACS Applied Materials & Interfaces, 2021, 13, 12531-12540.	4.0	53
20	Selfâ€Healing, Robust, and Stretchable Electrode by Direct Printing on Dynamic Polyurea Surface at Slightly Elevated Temperature. Advanced Functional Materials, 2021, 31, 2102225.	7.8	52
21	A Novel Strategy for Preparing Stretchable and Reliable Biphasic Liquid Metal. Advanced Functional Materials, 2019, 29, 1903840.	7.8	50
22	Nanofluidic energy conversion and molecular separation through highly stable clay-based membranes. Journal of Materials Chemistry A, 2019, 7, 14089-14096.	5.2	45
23	Bio-based graphene/sodium alginate aerogels for strain sensors. RSC Advances, 2016, 6, 64056-64064.	1.7	42
24	Liquid exfoliation of Znâ€“Al layered double hydroxide using NaOH/urea aqueous solution at low temperature. RSC Advances, 2014, 4, 18044.	1.7	40
25	Graphene nanosheets decorated with ZnO nanoparticles: facile synthesis and promising application for enhancing the mechanical and gas barrier properties of rubber nanocomposites. RSC Advances, 2015, 5, 57771-57780.	1.7	34
26	A Biomimetic Interface with High Adhesion, Tailorable Modulus for On-Skin Sensors, and Low-Power Actuators. Chemistry of Materials, 2019, 31, 8708-8716.	3.2	33
27	Interface design for enhancing the wettability of liquid metal to polyacrylate for intrinsically soft electronics. Journal of Materials Chemistry C, 2018, 6, 6755-6763.	2.7	29
28	High performance fiber-shaped supercapacitors based on coreâ€“shell fiber electrodes with adjustable surface wrinkles and robust interfaces. Journal of Materials Chemistry A, 2021, 9, 16852-16859.	5.2	27
29	Effect of 3â€propionylthioâ€1â€propyltrimethoxylsilane on structure, mechanical, and dynamic mechanical properties of NR/silica composites. Polymer Composites, 2009, 30, 955-961.	2.3	23
30	Hybrid of silver nanowire and pristine-graphene by liquid-phase exfoliation for synergetic effects on electrical conductive composites. RSC Advances, 2014, 4, 41876-41885.	1.7	22
31	Advanced stretchable characteristic of liquid metal for fabricating extremely stable electronics. Materials Letters, 2019, 235, 133-136.	1.3	21
32	The use of zinc dimethacrylate functionalized graphene as a reinforcement in rubber composites. Polymers for Advanced Technologies, 2015, 26, 423-431.	1.6	19
33	Synthesis and characterization of 3-benzothiazolthio-1-propyltriethoxylsilane and its reinforcement for styrene-butadiene rubber/silica composites. Journal of Applied Polymer Science, 2009, 112, 1967-1973.	1.3	18
34	Influence of graphene functionalized with zinc dimethacrylate on the mechanical and thermal properties of natural rubber nanocomposites. Polymer Composites, 2015, 36, 1775-1785.	2.3	18
35	Morphology and performance of styrene butadiene rubber filled with modified graphite nanoplatelet and carbon black. Polymers for Advanced Technologies, 2016, 27, 830-840.	1.6	13
36	Low voltage driven electro-active shape memory composites with 3D AgNWs conductive networks. Materials Letters, 2018, 220, 297-300.	1.3	13

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37	Piezoresistive fibers with record high sensitivity via the synergic optimization of porous microstructure and elastic modulus. Chemical Engineering Journal, 2022, 441, 136046.	6.6	13
38	Hybrid modified rubber powder and its application in cement mortar. Journal Wuhan University of Technology, Materials Science Edition, 2010, 25, 1033-1037.	0.4	12
39	Structure and flammability properties of NRâ€organoclay nanocomposites. Polymer Composites, 2009, 30, 107-110.	2.3	11
40	Facile, Low-Cost, UV-Curing Approach to Prepare Highly Conductive Composites for Flexible Electronics Applications. Journal of Electronic Materials, 2016, 45, 3603-3611.	1.0	10
41	Super Stretchable and Compressible Hydrogels Inspired by Hook-and-Loop Fasteners. Langmuir, 2021, 37, 7760-7770.	1.6	10
42	Insight into vulcanization mechanism of novel binary accelerators for natural rubber. Chinese Journal of Polymer Science (English Edition), 2014, 32, 1077-1085.	2.0	9
43	A multidimensional hierarchical structure designed for lateral strain-isolated ultrasensitive pressure sensing. Journal of Materials Chemistry C, 2020, 8, 922-929.	2.7	9
44	Interfacial Engineering for Highly Stable and Stretchable Electrodes Enabled by Printing/Writing Surfaceâ€Embedded Silver and Its Selective Alloying with Liquid Metals. Advanced Materials Interfaces, 2022, 9, .	1.9	6
45	Styrene butadiene rubber/carbon black composites modified by imidazole derivatives. International Journal of Polymer Analysis and Characterization, 2016, 21, 447-457.	0.9	5
46	Study on Crystallization Behavior of Solid-Phase Graft Copolymers of Polypropylene with Maleic Anhydride and Methyl Methacrylate. Polymer-Plastics Technology and Engineering, 2008, 47, 996-1001.	1.9	3
47	Novel blocked mercaptosilane (3-propionylthio-1- propyltrimethoxylsilane) for natural rubber/silica composite reinforcement in various curing systems. E-Polymers, 2008, 8, .	1.3	2
48	High performance and illumination stable In2O3 nanofibers-based field effect transistors by doping praseodymium. Surfaces and Interfaces, 2022, 29, 101781.	1.5	1