

Highly Stretchable, Elastic, and Ionic Conductive Hydrogels

Advanced Functional Materials

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Citation Report

#	ARTICLE	IF	CITATIONS
1	One-Step Preparation of a Highly Stretchable, Conductive, and Transparent Poly(vinyl alcohol)-Phytic Acid Hydrogel for Casual Writing Circuits. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 32441-32448.	4.0	106
2	A facile synthesis of self-healing hydrogels toward flexible quantum dot-based luminescent solar concentrators and white LEDs. <i>Journal of Materials Chemistry C</i> , 2019, 7, 10988-10995.	2.7	18
3	Skin-Inspired Gels with Toughness, Antifreezing, Conductivity, and Remoldability. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 28336-28344.	4.0	111
4	Conductive, Tough, Transparent, and Self-Healing Hydrogels Based on Catechol-Metal Ion Dual Self-Catalysis. <i>Chemistry of Materials</i> , 2019, 31, 5625-5632.	3.2	214
5	Facile fabrication and characterization of highly stretchable lignin-based hydroxyethyl cellulose self-healing hydrogel. <i>Carbohydrate Polymers</i> , 2019, 223, 115080.	5.1	109
6	A highly transparent and ultra-stretchable conductor with stable conductivity during large deformation. <i>Nature Communications</i> , 2019, 10, 3429.	5.8	297
7	Transparent, Antifreezing, Ionic Conductive Cellulose Hydrogel with Stable Sensitivity at Subzero Temperature. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 41710-41716.	4.0	141
8	Strain-Sensitive Performance of a Tough and Ink-Writable Polyacrylic Acid Ionic Gel Crosslinked by Carboxymethyl Cellulose. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1900329.	2.0	6
9	Equip the hydrogel with armor: strong and super tough biomass reinforced hydrogels with excellent conductivity and anti-bacterial performance. <i>Journal of Materials Chemistry A</i> , 2019, 7, 26917-26926.	5.2	93
10	Strong, Water-Stable Ionic Cable from Bio-Hydrogel. <i>Chemistry of Materials</i> , 2019, 31, 9288-9294.	3.2	24
11	High-Strength, Self-Adhesive, and Strain-Sensitive Chitosan/Poly(acrylic acid) Double-Network Nanocomposite Hydrogels Fabricated by Salt-Soaking Strategy for Flexible Sensors. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 39228-39237.	4.0	228
12	Flexible and Pressure-Responsive Sensors from Cellulose Fibers Coated with Multiwalled Carbon Nanotubes. <i>ACS Applied Electronic Materials</i> , 2019, 1, 1179-1188.	2.0	46
13	Skin-Inspired Antibacterial Conductive Hydrogels for Epidermal Sensors and Diabetic Foot Wound Dressings. <i>Advanced Functional Materials</i> , 2019, 29, 1901474.	7.8	371
14	Direct Current-Powered High-Performance Ionic Hydrogel Strain Sensor Based on Electrochemical Redox Reaction. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 24289-24297.	4.0	21
15	Nanocomposite interpenetrating hydrogels with high toughness and good self-recovery. <i>Colloid and Polymer Science</i> , 2019, 297, 821-830.	1.0	7
16	Development of Adhesive and Conductive Resilin-Based Hydrogels for Wearable Sensors. <i>Biomacromolecules</i> , 2019, 20, 3283-3293.	2.6	64
17	Highly Conductive, Stretchable, and Cell-Adhesive Hydrogel by Nanoclay Doping. <i>Small</i> , 2019, 15, e1901406.	5.2	62
18	Biopolymer-based carboxylated chitosan hydrogel film crosslinked by HCl as gel polymer electrolyte for all-solid-state supercapacitors. <i>Journal of Power Sources</i> , 2019, 426, 47-54.	4.0	122

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19	Intrinsically stretchable conductors and interconnects for electronic applications. <i>Materials Chemistry Frontiers</i> , 2019, 3, 1032-1051.	3.2	21
20	Highly Stretchable and Transparent Double-Network Hydrogel Ionic Conductors as Flexible Thermal-Mechanical Dual Sensors and Electroluminescent Devices. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 16765-16775.	4.0	246
21	A transparent, tough self-healing hydrogel based on a dual physically and chemically triple crosslinked network. <i>Journal of Materials Chemistry C</i> , 2019, 7, 14581-14587.	2.7	20
22	Cartilage-inspired hydrogel strain sensors with ultrahigh toughness, good self-recovery and stable anti-swelling properties. <i>Journal of Materials Chemistry A</i> , 2019, 7, 25441-25448.	5.2	111
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24	Breathable and Flexible Polymer Membranes with Mechanoresponsive Electric Resistance. <i>Advanced Functional Materials</i> , 2020, 30, 1907555.	7.8	44
25	Self-healing conductive hydrogels: preparation, properties and applications. <i>Nanoscale</i> , 2020, 12, 1224-1246.	2.8	286
26	Thermo-responsive shape memory sensors based on tough, remolding and anti-freezing hydrogels. <i>Journal of Materials Chemistry C</i> , 2020, 8, 2326-2335.	2.7	54
27	A stretchable and compressible ion gel based on a deep eutectic solvent applied as a strain sensor and electrolyte for supercapacitors. <i>Journal of Materials Chemistry C</i> , 2020, 8, 550-560.	2.7	109
28	Three-Dimensional Self-Healable Touch Sensing Artificial Skin Device. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 3953-3960.	4.0	40
29	Merkel's Disks Bioinspired Self-Powered Flexible Magnetoelectric Sensors Toward the Robotic Arm's Tactile Perceptual Functioning and Smart Learning. <i>Advanced Intelligent Systems</i> , 2020, 2, 1900140.	3.3	24
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31	Hydrogels as Potential Nano-, Micro- and Macro-Scale Systems for Controlled Drug Delivery. <i>Materials</i> , 2020, 13, 188.	1.3	76
32	Multifunctional hydrogel based on ionic liquid with antibacterial performance. <i>Journal of Molecular Liquids</i> , 2020, 299, 112185.	2.3	36
33	Zwitterionic Osmolyte-Based Hydrogels with Antifreezing Property, High Conductivity, and Stable Flexibility at Subzero Temperature. <i>Advanced Functional Materials</i> , 2020, 30, 1907986.	7.8	201
34	Self-Healing and Highly Stretchable Gelatin Hydrogel for Self-Powered Strain Sensor. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 1558-1566.	4.0	174
35	Tough and Stretchable Dual Ionically Cross-Linked Hydrogel with High Conductivity and Fast Recovery Property for High-Performance Flexible Sensors. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 1577-1587.	4.0	105
36	Sacrificial 3D printing of shrinkable silicone elastomers for enhanced feature resolution in flexible tissue scaffolds. <i>Acta Biomaterialia</i> , 2020, 117, 261-272.	4.1	32

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37	A Regenerable Hydrogel Electrolyte for Flexible Supercapacitors. IScience, 2020, 23, 101502.	1.9	31
38	Hydrogen Bonding-Reinforced Hydrogel Electrolyte for Flexible, Robust, and All-in-One Supercapacitor with Excellent Low-Temperature Tolerance. ACS Applied Materials & Interfaces, 2020, 12, 37977-37985.	4.0	95
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47	Design Strategies of Conductive Hydrogel for Biomedical Applications. Molecules, 2020, 25, 5296.	1.7	69
48	A semi-interpenetrating network ionic composite hydrogel with low modulus, fast self-recoverability and high conductivity as flexible sensor. Carbohydrate Polymers, 2020, 248, 116797.	5.1	85
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50	Multifunctional Poly(vinyl alcohol) Nanocomposite Organohydrogel for Flexible Strain and Temperature Sensor. ACS Applied Materials & Interfaces, 2020, 12, 40815-40827.	4.0	141
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57	Highly Stretchable, Compressible, Adhesive, Conductive Self-healing Composite Hydrogels with Sensor Capacity. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2020, 38, 1221-1229.	2.0	24
58	Skin-Contactable and Antifreezing Strain Sensors Based on Bilayer Hydrogels. <i>Chemistry of Materials</i> , 2020, 32, 8938-8946.	3.2	77
59	Robust Conductive Hydrogel with Antibacterial Activity and UV-Shielding Performance. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 17867-17875.	1.8	21
60	Stretchable Self-Powered Generator for Multiple Functional Detection. <i>ACS Applied Electronic Materials</i> , 2020, 2, 3577-3584.	2.0	4
61	An Electroactive Oligo-EDOT Platform for Neural Tissue Engineering. <i>Advanced Functional Materials</i> , 2020, 30, 2003710.	7.8	32
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63	A facile approach to obtain highly tough and stretchable LAPONITE®-based nanocomposite hydrogels. <i>Soft Matter</i> , 2020, 16, 8394-8399.	1.2	21
64	Facile Preparation of Eco-Friendly, Flexible Starch-Based Materials with Ionic Conductivity and Strain-Responsiveness. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 19117-19128.	3.2	27
65	<p>Potential Applications of Nanomaterials and Technology for Diabetic Wound Healing</p>. <i>International Journal of Nanomedicine</i> , 2020, Volume 15, 9717-9743.	3.3	106
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67	Ultra elastic, stretchable, self-healing conductive hydrogels with tunable optical properties for highly sensitive soft electronic sensors. <i>Journal of Materials Chemistry A</i> , 2020, 8, 24718-24733.	5.2	128
68	Highly Sensitive Pressure and Strain Sensors Based on Stretchable and Recoverable Ion-Conductive Physically Cross-Linked Double-Network Hydrogels. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 51969-51977.	4.0	79
69	A skin-matchable, recyclable and biofriendly strain sensor based on a hydrolyzed keratin-containing hydrogel. <i>Journal of Materials Chemistry A</i> , 2020, 8, 24175-24183.	5.2	106
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71	Freezing-Tolerant, Highly Sensitive Strain and Pressure Sensors Assembled from Ionic Conductive Hydrogels with Dynamic Cross-Links. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 25334-25344.	4.0	189
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81	Electrically Conductive Tough Gelatin Hydrogel. Advanced Electronic Materials, 2020, 6, 2000040.	2.6	55
82	Self-powered ionic sensors overcoming the limitation of ionic conductors as wearable sensing devices. Materials Today Physics, 2020, 15, 100246.	2.9	16
83	Mechanical, adhesive and self-healing ionic liquid hydrogels for electrolytes and flexible strain sensors. Journal of Materials Chemistry C, 2020, 8, 11119-11127.	2.7	57
84	Sandwich-like Polypyrrole/Reduced Graphene Oxide Nanosheets Integrated Gelatin Hydrogel as Mechanically and Thermally Sensitive Skinlike Bioelectronics. ACS Sustainable Chemistry and Engineering, 2020, 8, 11119-11127.	3.2	14
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89	Hydrogels and Hydrogel-Derived Materials for Energy and Water Sustainability. Chemical Reviews, 2020, 120, 7642-7707.	23.0	646
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134	An amylopectin-enabled skin-mounted hydrogel wearable sensor. <i>Journal of Materials Chemistry B</i> , 2021, 9, 1082-1088.	2.9	43
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136	A DNA-inspired hydrogel mechanoreceptor with skin-like mechanical behavior. <i>Journal of Materials Chemistry A</i> , 2021, 9, 1835-1844.	5.2	48
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143	Highly Stretchable, Tough, Resilient, and Antifatigue Hydrogels Based on Multiple Hydrogen Bonding Interactions Formed by Phenylalanine Derivatives. <i>Biomacromolecules</i> , 2021, 22, 1297-1304.	2.6	26
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149	Material Design for 3D Multifunctional Hydrogel Structure Preparation. <i>Macromolecular Materials and Engineering</i> , 2021, 306, 2100007.	1.7	5
150	Healable, Degradable, and Conductive MXene Nanocomposite Hydrogel for Multifunctional Epidermal Sensors. <i>ACS Nano</i> , 2021, 15, 7765-7773.	7.3	259
151	Recent advances of hydrogel network models for studies on mechanical behaviors. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2021, 37, 367-386.	1.5	56
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