## Ionoskins: Nonvolatile, Highly Transparent, Ultrastretc Wearable Electronics

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**Citation Report** 

#	Article	IF	CITATIONS
1	Impact of chain flexibility of copolymer gelators on performance of ion gel electrolytes for functional electrochemical devices. Journal of Industrial and Engineering Chemistry, 2020, 90, 341-350.	2.9	11
2	Cellulose Nanofibrils Enhanced, Strong, Stretchable, Freezingâ€Tolerant Ionic Conductive Organohydrogel for Multiâ€Functional Sensors. Advanced Functional Materials, 2020, 30, 2003430.	7.8	477
3	Block <i>versus</i> random: effective molecular configuration of copolymer gelators to obtain high-performance gel electrolytes for functional electrochemical devices. Journal of Materials Chemistry C, 2020, 8, 17045-17053.	2.7	8
4	Multifunctional Poly(vinyl alcohol) Nanocomposite Organohydrogel for Flexible Strain and Temperature Sensor. ACS Applied Materials & Interfaces, 2020, 12, 40815-40827.	4.0	141
5	Solid-state and liquid-free elastomeric ionic conductors with autonomous self-healing ability. Materials Horizons, 2020, 7, 2994-3004.	6.4	103
6	Engineering hydrogels by soaking: from mechanical strengthening to environmental adaptation. Chemical Communications, 2020, 56, 13731-13747.	2.2	30
7	Bioinspired Selfâ€Healing Human–Machine Interactive Touch Pad with Pressureâ€Sensitive Adhesiveness on Targeted Substrates. Advanced Materials, 2020, 32, e2004290.	11.1	210
8	Protein Gel Phase Transition: Toward Superiorly Transparent and Hysteresisâ€Free Wearable Electronics. Advanced Functional Materials, 2020, 30, 1910080.	7.8	30
9	Adaptive Deformation of Ionic Domains in Hydrogel Enforcing Dielectric Coupling for Sensitive Response to Mechanical Stretching. Advanced Intelligent Systems, 2020, 2, 2000016.	3.3	0
10	A facile strategy for fabricating multifunctional ionogel based electronic skin. Journal of Materials Chemistry C, 2020, 8, 8368-8373.	2.7	55
11	Ionic Liquid–Polymer Composites: A New Platform for Multifunctional Applications. Advanced Functional Materials, 2020, 30, 1909736.	7.8	197
12	Multimodal Stimuli-Responsive Fluorophore-Functionalized Heterotelechelic Poly(2-isopropyl-2-oxazoline). ACS Applied Polymer Materials, 2020, 2, 3535-3542.	2.0	7
13	Mechanically Robust, Elastic, and Healable Ionogels for Highly Sensitive Ultraâ€Đurable Ionic Skins. Advanced Materials, 2020, 32, e2002706.	11.1	300
14	Various Coating Methodologies of WO3 According to the Purpose for Electrochromic Devices. Nanomaterials, 2020, 10, 821.	1.9	18
15	Mechanically robust and thermally stable electrochemical devices based on star-shaped random copolymer gel-electrolytes. Journal of Industrial and Engineering Chemistry, 2020, 88, 233-240.	2.9	7
16	Nanofibrillar Poly(vinyl alcohol) Ionic Organohydrogels for Smart Contact Lens and Human-Interactive Sensing. ACS Applied Materials & Interfaces, 2020, 12, 23514-23522.	4.0	59
17	Highly tough, freezing-tolerant, healable and thermoplastic starch/poly(vinyl alcohol) organohydrogels for flexible electronic devices. Journal of Materials Chemistry A, 2021, 9, 18406-18420.	5.2	91
18	Correlation between ion gel characteristics and performance of ionic pressure sensors. Journal of Materials Chemistry C, 2021, 9, 5445-5451.	2.7	7

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19	A highly conductive hydrogel driven by phytic acid towards a wearable sensor with freezing and dehydration resistance. Journal of Materials Chemistry A, 2021, 9, 22615-22625.	5.2	80
20	3D Printable, Highly Stretchable, Superior Stable Ionogels Based on Poly(ionic liquid) with Hyperbranched Polymers as Macro-cross-linkers for High-Performance Strain Sensors. ACS Applied Materials & Interfaces, 2021, 13, 5614-5624.	4.0	76
21	Coumarin derivative trigger controlled photo-healing of ion gels and photo-controlled reversible adhesiveness. European Polymer Journal, 2021, 144, 110213.	2.6	10
22	Ultraâ€Sensitive and Stretchable Ionic Skins for Highâ€Precision Motion Monitoring. Advanced Functional Materials, 2021, 31, 2010199.	7.8	60
23	A Mechanically Robust and Versatile Liquidâ€Free Ionic Conductive Elastomer. Advanced Materials, 2021, 33, e2006111.	11.1	188
24	Functional Ion Gels: Versatile Electrolyte Platforms for Electrochemical Applications. Chemistry of Materials, 2021, 33, 2683-2705.	3.2	51
25	Colorimetric Ionic Organohydrogels Mimicking Human Skin for Mechanical Stimuli Sensing and Injury Visualization. ACS Applied Materials & Interfaces, 2021, 13, 26490-26497.	4.0	23
26	Highly Transparent, Stretchable, and Conductive Supramolecular Ionogels Integrated with Three-Dimensional Printable, Adhesive, Healable, and Recyclable Character. ACS Applied Materials & Interfaces, 2021, 13, 25365-25373.	4.0	45
27	Stretchable and Soft Organic–Ionic Devices for Bodyâ€Integrated Electronic Systems. Advanced Materials Technologies, 2022, 7, 2001273.	3.0	16
28	Block Copolymerâ€Based Supramolecular Ionogels for Accurate Onâ€Skin Motion Monitoring. Advanced Functional Materials, 2021, 31, 2102386.	7.8	60
29	Ambiently and Mechanically Stable Ionogels for Soft Ionotronics. Advanced Functional Materials, 2021, 31, 2102773.	7.8	95
30	Highly Transparent, Stretchable, and Self-Healable Ionogel for Multifunctional Sensors, Triboelectric Nanogenerator, and Wearable Fibrous Electronics. Advanced Fiber Materials, 2022, 4, 98-107.	7.9	83
31	Skin-like mechanoresponsive self-healing ionic elastomer from supramolecular zwitterionic network. Nature Communications, 2021, 12, 4082.	5.8	229
32	Hydrogen-bonded network enables polyelectrolyte complex hydrogels with high stretchability, excellent fatigue resistance and self-healability for human motion detection. Composites Part B: Engineering, 2021, 217, 108901.	5.9	44
33	Recent Progress in Essential Functions of Soft Electronic Skin. Advanced Functional Materials, 2021, 31, 2104686.	7.8	192
34	Advances in transparent and stretchable strain sensors. Advanced Composites and Hybrid Materials, 2021, 4, 435-450.	9.9	109
35	Azobenzene-containing liquid crystalline composites for robust ultraviolet detectors based on conversion of illuminance-mechanical stress-electric signals. Nature Communications, 2021, 12, 4875.	5.8	37
36	Porous Ion Gel: A Versatile Ionotronic Sensory Platform for High-Performance, Wearable Ionoskins with Electrical and Optical Dual Output. ACS Nano, 2021, 15, 15132-15141.	7.3	48

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37	Polymeric Ion Conductors Based on Sonoâ€Polymerized Zwitterionic Polymers for Electrochromic Supercapacitors with Improved Shelf‣ife Stability. Macromolecular Rapid Communications, 2021, 42, e2100468.	2.0	6
38	Self-healing, anti-freezing and highly stretchable polyurethane ionogel as ionic skin for wireless strain sensing. Chemical Engineering Journal, 2021, 426, 130724.	6.6	65
39	Anti-bacterial silk-based hydrogels for multifunctional electrical skin with mechanical-thermal dual sensitive integration. Chemical Engineering Journal, 2021, 426, 130722.	6.6	23
40	Polymerizable deep eutectic solvent-based mechanically strong and ultra-stretchable conductive elastomers for detecting human motions. Journal of Materials Chemistry A, 2021, 9, 4890-4897.	5.2	70
41	Non-volatile conductive gels made from deep eutectic solvents and oxidised cellulose nanofibrils. Nanoscale Advances, 2021, 3, 2252-2260.	2.2	18
42	Nanotechnology-enabled polymer-based flexible electronics and their potential applications. , 2021, , 321-340.		1
43	Stretchable, healable, adhesive, transparent, anti-drying and anti-freezing organohydrogels toward multi-functional sensors and information platforms. Journal of Materials Chemistry C, 2021, 9, 15530-15541.	2.7	16
44	A very mechanically strong and stretchable liquid-free double-network ionic conductor. Journal of Materials Chemistry A, 2021, 9, 23714-23721.	5.2	32
45	A Transparent, Highly Stretchable, Solventâ€Resistant, Recyclable Multifunctional Ionogel with Underwater Selfâ€Healing and Adhesion for Reliable Strain Sensors. Advanced Materials, 2021, 33, e2105306.	11.1	300
46	Ionic Conductive Organohydrogel With Ultrastretchability, Self-Healable and Freezing-Tolerant Properties for Wearable Strain Sensor. Frontiers in Chemistry, 2021, 9, 758844.	1.8	14
47	High Performance Double Conductive Network Hydrogel Based on Soaking Strategy for Supercapacitors. Macromolecular Materials and Engineering, 0, , 2100652.	1.7	4
48	Nonvolatile, stretchable and adhesive ionogel fiber sensor designed for extreme environments. Chemical Engineering Journal, 2022, 433, 133500.	6.6	39
49	Multifunctional Organohydrogel-Based Ionic Skin for Capacitance and Temperature Sensing toward Intelligent Skin-like Devices. Chemistry of Materials, 2021, 33, 8623-8634.	3.2	49
50	Ionic liquids for advanced materials. Materials Today Nano, 2022, 17, 100159.	2.3	69
51	3D Printable, ultra-stretchable, Self-healable, and self-adhesive dual cross-linked nanocomposite ionogels as ultra-durable strain sensors for motion detection and wearable human-machine interface. Chemical Engineering Journal, 2022, 431, 133949.	6.6	55
52	Ionic flexible force sensors and their potential applications. Journal of Materials Chemistry C, 2021, 9, 16378-16390.	2.7	13
53	An environmentally tolerant, highly stable, cellulose nanofiber-reinforced, conductive hydrogel multifunctional sensor. Carbohydrate Polymers, 2022, 284, 119199.	5.1	66
54	Photo-healable ion gel with high mechanical property, fatigue resistance and shear resistance using a coumarin group containing diblock copolymer in an ionic liquid. European Polymer Journal, 2022, 165, 111002.	2.6	5

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55	Spatial Adjustment Strategy to Improve the Sensitivity of Ionogels for Flexible Sensors. Macromolecular Chemistry and Physics, 2022, 223, .	1.1	3
56	Enhanced stretchability and robustness towards flexible ionotronics via double-network structure and ion-dipole interactions. Chemical Engineering Journal, 2022, 434, 134752.	6.6	29
57	Recent Progress on Smart Fiber and Textile Based Wearable Strain Sensors: Materials, Fabrications and Applications. Advanced Fiber Materials, 2022, 4, 361-389.	7.9	136
58	Stretchable solvent-free ionic conductor with self-wrinkling microstructures for ultrasensitive strain sensor. Materials Horizons, 2022, 9, 1679-1689.	6.4	34
59	Tough, Instant, and Repeatable Adhesion of Selfâ€Healable Elastomers to Diverse Soft and Hard Surfaces. Advanced Science, 2022, 9, e2105742.	5.6	24
60	Highly Stretchable Conductive Covalent Coacervate Gels for Electronic Skin. Biomacromolecules, 2022, 23, 1423-1432.	2.6	5
61	Transparent organogel based on photopolymerizable magnetic cationic monomer for electromagnetic wave absorbing. Journal of Industrial and Engineering Chemistry, 2022, 109, 538-546.	2.9	7
62	Tough and stretchable ionogels by in situ phase separation. Nature Materials, 2022, 21, 359-365.	13.3	246
63	Tailoring Diffusion Dynamics in Energy Storage Ionic Conductors for Highâ€Performance, Multiâ€Function, Single‣ayer Electrochromic Supercapacitors. Advanced Functional Materials, 2022, 32,	7.8	26
64	Ultrastretchable, Adhesive, Fast Self-Healable, and Three-Dimensional Printable Photoluminescent Ionic Skin Based on Hybrid Network Ionogels. ACS Applied Materials & Interfaces, 2022, 14, 2029-2037.	4.0	54
65	Ionic Liquid-Based Gels for Applications in Electrochemical Energy Storage and Conversion Devices: A Review of Recent Progress and Future Prospects. Gels, 2022, 8, 2.	2.1	16
66	Dual Thermo-Responsive and Strain-Responsive lonogels for Smart Windows and Temperature/Motion Monitoring. ACS Applied Materials & amp; Interfaces, 2022, 14, 20083-20092.	4.0	23
67	Organic ionic fluid-based wearable sensors for healthcare. Sensors & Diagnostics, 2022, 1, 598-613.	1.9	4
68	Binary Co-Gelator Strategy: Toward Highly Deformable Ionic Conductors for Wearable Ionoskins. ACS Applied Materials & Interfaces, 2022, 14, 32533-32540.	4.0	3
69	Anisotropic Alignment of Bacterial Nanocellulose Ionogels for Unconventionally High Combination of Stiffness and Damping. ACS Applied Materials & amp; Interfaces, 2022, 14, 30056-30066.	4.0	5
70	Ion-cluster-mediated ultrafast self-healable ionoconductors for reconfigurable electronics. Nature Communications, 2022, 13, .	5.8	30
71	Roles of Ionic Liquids in Adjusting Nature of Ionogels: A Mini Review. Advanced Functional Materials, 2022, 32, .	7.8	71
72	Ultraâ€stretchable, selfâ€healable, and reprocessable ionic conductive hydrogels enabled by dual dynamic networks. Journal of Polymer Science, 2022, 60, 2817-2827.	2.0	5

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73	Muscle fibers inspired electrospun nanostructures reinforced conductive fibers for smart wearable optoelectronics and energy generators. Nano Energy, 2022, 101, 107592.	8.2	44
74	Bendingâ€Insensitive Intrinsically Flexible Ultraviolet Encoding Devices Based on Piezoelectric Nanogeneratorâ€5upplied Liquid Crystalline Polymer Fabrics. Small, 2022, 18, .	5.2	6
75	Ionic Liquidâ€Based Polymer Nanocomposites for Sensors, Energy, Biomedicine, and Environmental Applications: Roadmap to the Future. Advanced Science, 2022, 9, .	5.6	62
76	Orthogonal Growth for Fabricating Hydrogel Sensors and Circuit Boards with In Situ Postâ€Tunable Performance. Advanced Functional Materials, 2022, 32, .	7.8	18
77	Metal–organic framework (MOF) facilitated highly stretchable and fatigue-resistant ionogels for recyclable sensors. Materials Horizons, 2022, 9, 2881-2892.	6.4	31
78	Poly( <i>N</i> , <i>N</i> -dimethyl)acrylamide-based ion-conductive gel with transparency, self-adhesion and rapid self-healing properties for human motion detection. Soft Matter, 2022, 18, 6115-6123.	1.2	7
79	Holding it together: noncovalent cross-linking strategies for ionogels and eutectogels. Materials Advances, 2022, 3, 7709-7725.	2.6	12
80	A Wearable Pressure Sensor Based on Ionogel/Textile for Human Motion Monitoring. Fibers and Polymers, 2022, 23, 2351-2363.	1.1	3
81	Silver-Reduced Poly(Ethylene Glycol) Diacrylate Composites with Microline Arrays for Directional Bending Sensors. ACS Applied Materials & amp; Interfaces, 2022, 14, 44869-44877.	4.0	0
82	High strength, antiâ€freezing, and conductive poly(vinyl alcohol)/urea ionic hydrogels as soft sensor. Polymer Engineering and Science, 2022, 62, 3985-3993.	1.5	8
83	Cytoskeleton-inspired hydrogel ionotronics for tactile perception and electroluminescent display in complex mechanical environments. Materials Horizons, 2023, 10, 136-148.	6.4	20
84	Hydrophobic deep eutectic solventâ€based ionic conductive gels with highly stretchable, fatigueâ€resistant and adhesive performances for reliable flexible strain sensors. Journal of Applied Polymer Science, 2023, 140, .	1.3	2
85	Improved Electrochemical Performance from Nano-Cobalt Oxide: Bifunctional Application in Energy Generation and Storage. ACS Applied Energy Materials, 2022, 5, 12907-12915.	2.5	6
86	Intrinsically stretchable ionoelastomer junction logic gate synchronously deformable with liquid metal. Applied Physics Reviews, 2022, 9, .	5.5	6
87	Strong and Ultraâ€Tough Supramolecular Hydrogel Enabled by Strainâ€Induced Microphase Separation. Advanced Functional Materials, 2023, 33, .	7.8	26
88	Thermally Induced Gelation of Cellulose Nanocrystals in Deep Eutectic Solvents for 3D Printable and Self-Healable Ionogels. ACS Applied Polymer Materials, 2022, 4, 9221-9230.	2.0	10
89	Fluorescent double network ionogels with fast self-healability and high resilience for reliable human motion detection. Materials Horizons, 2023, 10, 646-656.	6.4	19
90	Continuous fabrication of robust ionogel fibers for ultrastable sensors via dynamic reactive spinning. Chemical Engineering Journal, 2023, 455, 140796.	6.6	6

#	Article	IF	CITATIONS
91	Tough Ionogels: Synthesis, Toughening Mechanisms, and Mechanical Properties─A Perspective. Jacs Au, 2022, 2, 2645-2657.	3.6	28
92	Multiwavelength Color Switching from Polyanilineâ€Viologen Bilayer: Inching toward Versatile Allâ€Organic Flexible Electrochromic Device. Advanced Electronic Materials, 2023, 9, .	2.6	22
93	Bio-Inspired Ion-Conducting Foam Elastomer for Human Motion Monitoring. ACS Applied Polymer Materials, 2023, 5, 391-399.	2.0	4
94	Highly Damping and Selfâ€Healable Ionic Elastomer from Dynamic Phase Separation of Sticky Fluorinated Polymers. Advanced Materials, 2023, 35, .	11.1	47
95	3D Printed Ionogels In Sensors. Polymer-Plastics Technology and Materials, 2023, 62, 632-654.	0.6	1
96	Muscle Contraction-Inspired Tough Hydrogels. ACS Applied Materials & Interfaces, 2023, 15, 8462-8470.	4.0	8
97	Hydrogelâ€Based Multifunctional Soft Electronics with Distributed Sensing Units: A Review. , 2023, 2, .		3
98	Ionic Flexible Mechanical Sensors: Mechanisms, Structural Engineering, Applications, and Challenges. , 2023, 2, .		0
99	Stretch-Induced Robust Intrinsic Antibacterial Thermoplastic Gelatin Organohydrogel for a Thermoenhanced Supercapacitor and Mono-gauge-factor Sensor. ACS Applied Materials & Interfaces, 2023, 15, 20278-20293.	4.0	6
100	Design of healable, porous polyurethane with large ionic liquids loading amounts towards ultra-durable pressure sensor. European Polymer Journal, 2023, 191, 112018.	2.6	6
101	Poisson–Nernst–Planck framework for modelling ionic strain and temperature sensors. Journal of Materials Chemistry B, 2023, 11, 5544-5551.	2.9	2
102	Environmentally Adaptable Organo–Ionic Gelâ€Based Electrodes for Realâ€Time Onâ€Skin Electrocardiography Monitoring. Advanced Healthcare Materials, 2023, 12, .	3.9	3
103	Wideâ€Humidity Range Applicable, Antiâ€Freezing, and Healable Zwitterionic Hydrogels for Ion‣eakageâ€Free Iontronic Sensors. Advanced Materials, 2023, 35, .	11.1	21
104	Ionogels: recent advances in design, material properties and emerging biomedical applications. Chemical Society Reviews, 2023, 52, 2497-2527.	18.7	39
105	Progress of Hydrophobic Ionogels: A Review. Macromolecular Rapid Communications, 2023, 44, .	2.0	1
106	A wearable alternating current electroluminescent device based on imidazole chloride ionogel films with high conductivity, stretchability and transmittance. Journal of Materials Chemistry C, 2023, 11, 5882-5889.	2.7	2
107	Sustainable Collagen Blends with Different Ionic Liquids for Resistive Touch Sensing Applications. ACS Sustainable Chemistry and Engineering, 2023, 11, 5986-5998.	3.2	6
108	Designing Ionic Conductive Elastomers Using Hydrophobic Networks and Hydrophilic Salt Hydrates with Improved Stability in Air. Advanced Electronic Materials, 0, , .	2.6	0

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109	A Lowâ€Hysteresis and Highly Stretchable Ionogel Enabled by Well Dispersed Slidable Cross‣inker for Rapid Humanâ€Machine Interaction. Advanced Functional Materials, 2023, 33, .	7.8	14
128	High-sensitivity and ultralow-hysteresis fluorine-rich ionogel strain sensors for multi-environment contact and contactless sensing. Materials Horizons, 2023, 10, 5907-5919.	6.4	2
139	Hyper strength, high sensitivity integrated wearable signal sensor based on non-covalent interaction of an ionic liquid and bacterial cellulose for human behavior monitoring. Materials Horizons, 0, , .	6.4	0