

Guanghui Gao

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8592388/guanghui-gao-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

106
papers

3,323
citations

34
h-index

53
g-index

110
ext. papers

4,762
ext. citations

7.6
avg, IF

6.45
L-index

#	Paper	IF	Citations
106	A Multiresponsive Anisotropic Hydrogel with Macroscopic 3D Complex Deformations. <i>Advanced Functional Materials</i> , 2016 , 26, 8670-8676	15.6	153
105	Ultra-stretchable wearable strain sensors based on skin-inspired adhesive, tough and conductive hydrogels. <i>Chemical Engineering Journal</i> , 2019 , 365, 10-19	14.7	131
104	Robust and flexible strain sensors based on dual physically cross-linked double network hydrogels for monitoring human-motion. <i>Chemical Engineering Journal</i> , 2018 , 354, 817-824	14.7	125
103	Bioinspired Adhesive Hydrogel Driven by Adenine and Thymine. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 17645-17652	9.5	121
102	A flexible, adhesive and self-healable hydrogel-based wearable strain sensor for human motion and physiological signal monitoring. <i>Journal of Materials Chemistry B</i> , 2019 , 7, 4638-4648	7.3	116
101	Bioinspired Adhesive Hydrogels Tackified by Nucleobases. <i>Advanced Functional Materials</i> , 2017 , 27, 17031-17038	11.3	103
100	Ultrastretchable Wearable Strain and Pressure Sensors Based on Adhesive, Tough, and Self-healing Hydrogels for Human Motion Monitoring. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 25613-25623	9.5	99
99	Bioinspired Dynamic Cross-Linking Hydrogel Sensors with Skin-like Strain and Pressure Sensing Behaviors. <i>Chemistry of Materials</i> , 2019 , 31, 9522-9531	9.6	98
98	One-step synthesis of photoluminescent carbon dots with excitation-independent emission for selective bioimaging and gene delivery. <i>Journal of Colloid and Interface Science</i> , 2017 , 492, 1-7	9.3	89
97	Biomimetic anti-freezing polymeric hydrogels: keeping soft-wet materials active in cold environments. <i>Materials Horizons</i> , 2021 , 8, 351-369	14.4	85
96	Mussel-inspired multifunctional supramolecular hydrogels with self-healing, shape memory and adhesive properties. <i>Polymer Chemistry</i> , 2016 , 7, 5343-5346	4.9	76
95	Fe-, pH-, Thermoresponsive Supramolecular Hydrogel with Multishape Memory Effect. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 9038-9044	9.5	73
94	Hydrophobic association hydrogels with excellent mechanical and self-healing properties. <i>European Polymer Journal</i> , 2019 , 112, 660-669	5.2	70
93	Wearable strain sensors based on casein-driven tough, adhesive and anti-freezing hydrogels for monitoring human-motion. <i>Journal of Materials Chemistry B</i> , 2019 , 7, 5230-5236	7.3	64
92	Conductive Organohydrogels with Ultrastretchability, Antifreezing, Self-Healing, and Adhesive Properties for Motion Detection and Signal Transmission. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 3428-3437	9.5	63
91	Bioinspired Nucleobase-Driven Nonswellable Adhesive and Tough Gel with Excellent Underwater Adhesion. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 6644-6651	9.5	62
90	A tough, stretchable, and extensively sticky hydrogel driven by milk protein. <i>Polymer Chemistry</i> , 2018 , 9, 2617-2624	4.9	59

89	Skin-Inspired Gels with Toughness, Antifreezing, Conductivity, and Remoldability. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 28336-28344	9.5	59
88	Transparent and conductive amino acid-tackified hydrogels as wearable strain sensors. <i>Chemical Engineering Journal</i> , 2019 , 375, 121915	14.7	53
87	Solvent-Resistant and Nonswellable Hydrogel Conductor toward Mechanical Perception in Diverse Liquid Media. <i>ACS Nano</i> , 2020 , 14, 13709-13717	16.7	53
86	Tough Adhesion of Nucleobase-Tackified Gels in Diverse Solvents. <i>Advanced Functional Materials</i> , 2019 , 29, 1900450	15.6	53
85	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	13	53
84	Fish-inspired anti-icing hydrogel sensors with low-temperature adhesion and toughness. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 9373-9381	13	52
83	Tough, adhesive and conductive polysaccharide hydrogels mediated by ferric solution. <i>Carbohydrate Polymers</i> , 2019 , 211, 1-10	10.3	49
82	Low-Cost, Rapidly Responsive, Controllable, and Reversible Photochromic Hydrogel for Display and Storage. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 13975-13984	9.5	49
81	Nucleotide-Regulated Tough and Rapidly Self-Recoverable Hydrogels for Highly Sensitive and Durable Pressure and Strain Sensors. <i>Chemistry of Materials</i> , 2019 , 31, 5881-5889	9.6	49
80	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	13	44
79	Tough and pH-sensitive hydroxypropyl guar gum/polyacrylamide hybrid double-network hydrogel. <i>Chemical Engineering Journal</i> , 2016 , 306, 953-960	14.7	44
78	Core cross-linked poly(ethylene glycol)-graft-Dextran nanoparticles for reduction and pH dual responsive intracellular drug delivery. <i>Journal of Colloid and Interface Science</i> , 2017 , 496, 201-210	9.3	40
77	Highly tough, anti-fatigue and rapidly self-recoverable hydrogels reinforced with core-shell inorganic-organic hybrid latex particles. <i>Soft Matter</i> , 2017 , 13, 6059-6067	3.6	40
76	Mussel-inspired tough hydrogels with self-repairing and tissue adhesion. <i>Applied Surface Science</i> , 2018 , 427, 74-82	6.7	36
75	DNA-inspired anti-freezing wet-adhesion and tough hydrogel for sweaty skin sensor. <i>Chemical Engineering Journal</i> , 2020 , 394, 124898	14.7	36
74	High strength, anti-freezing and strain sensing carboxymethyl cellulose-based organohydrogel. <i>Carbohydrate Polymers</i> , 2019 , 223, 115051	10.3	34
73	An acidic pH-triggered polymeric micelle for dual-modality MR and optical imaging. <i>Journal of Materials Chemistry</i> , 2010 , 20, 5454		34
72	Highly sensitive and wearable gel-based sensors with a dynamic physically cross-linked structure for strain-stimulus detection over a wide temperature range. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 11303-11314	7.1	33

71	Skin-Contactable and Antifreezing Strain Sensors Based on Bilayer Hydrogels. <i>Chemistry of Materials</i> , 2020 , 32, 8938-8946	9.6	33
70	Nucleotide-driven skin-attachable hydrogels toward visual human-machine interfaces. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 4515-4523	13	32
69	The role of chemical and physical crosslinking in different deformation stages of hybrid hydrogels. <i>European Polymer Journal</i> , 2018 , 100, 86-95	5.2	31
68	Improvement of compatibility and mechanical properties of the poly(lactic acid)/poly(butylene adipate-co-terephthalate) blends and films by reactive extrusion with chain extender. <i>Polymer Engineering and Science</i> , 2018 , 58, 1868-1878	2.3	30
67	All-in-one hydrolyzed keratin protein-modified polyacrylamide composite hydrogel transducer. <i>Chemical Engineering Journal</i> , 2020 , 398, 125555	14.7	28
66	Bio-inspired adhesive and self-healing hydrogels as flexible strain sensors for monitoring human activities. <i>Materials Science and Engineering C</i> , 2020 , 106, 110168	8.3	28
65	Rapidly self-recoverable and fatigue-resistant hydrogels toughened by chemical crosslinking and hydrophobic association. <i>European Polymer Journal</i> , 2017 , 89, 185-194	5.2	27
64	A DNA-inspired hydrogel mechanoreceptor with skin-like mechanical behavior. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 1835-1844	13	26
63	A transparent and adhesive carboxymethyl cellulose/polypyrrole hydrogel electrode for flexible supercapacitors. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 8234-8242	7.1	25
62	Mechanical, adhesive and self-healing ionic liquid hydrogels for electrolytes and flexible strain sensors. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 11119-11127	7.1	25
61	The effect of hydrophobic alkyl chain length on the mechanical properties of latex particle hydrogels. <i>RSC Advances</i> , 2017 , 7, 44673-44679	3.7	25
60	Deformation mechanism of polystyrene toughened with sub-micrometer monodisperse rubber particles. <i>Polymer International</i> , 2006 , 55, 1215-1221	3.3	25
59	Mechanical and Rheological Behavior of Hybrid Cross-Linked Polyacrylamide/Cationic Micelle Hydrogels. <i>Macromolecular Materials and Engineering</i> , 2017 , 302, 1700402	3.9	24
58	Thermo-responsive shape memory sensors based on tough, remolding and anti-freezing hydrogels. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 2326-2335	7.1	24
57	Tough, sticky and remoldable hydrophobic association hydrogel regulated by polysaccharide and sodium dodecyl sulfate as emulsifiers. <i>Carbohydrate Polymers</i> , 2018 , 201, 591-598	10.3	23
56	Alginate fiber toughened gels similar to skin intelligence as ionic sensors. <i>Carbohydrate Polymers</i> , 2020 , 235, 116018	10.3	22
55	Joint double-network hydrogels with excellent mechanical performance. <i>Polymer</i> , 2018 , 153, 607-615	3.9	22
54	Highly Mechanical and Fatigue-Resistant Double Network Hydrogels by Dual Physically Hydrophobic Association and Ionic Crosslinking. <i>Macromolecular Materials and Engineering</i> , 2018 , 303, 1800072	3.9	21

53	Durable and Controllable Smart Windows Based on Thermochromic Hydrogels. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 42193-42201	9.5	19
52	Chitosan-driven skin-attachable hydrogel sensors toward human motion and physiological signal monitoring. <i>Carbohydrate Polymers</i> , 2021 , 268, 118240	10.3	19
51	Super-tough, ultra-stretchable and strongly compressive hydrogels with core-shell latex particles inducing efficient aggregation of hydrophobic chains. <i>Soft Matter</i> , 2017 , 13, 3352-3358	3.6	17
50	Bio-Based Hydrogel Transducer for Measuring Human Motion with Stable Adhesion and Ultrahigh Toughness. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 24173-24182	9.5	17
49	A rapidly responsive photochromic hydrogel with high mechanical strength for ink-free printing. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 7619-7625	7.1	17
48	Anti-fatigue adhesive and tough hydrogels regulated by adenine and uracil. <i>Polymer Chemistry</i> , 2018 , 9, 4535-4542	4.9	16
47	Influence of core-shell rubber particles synthesized with different initiation systems on the impact toughness of modified polystyrene. <i>Journal of Applied Polymer Science</i> , 2007 , 103, 738-744	2.9	16
46	A wide temperature-tolerant hydrogel electrolyte mediated by phosphoric acid towards flexible supercapacitors. <i>Chemical Engineering Journal</i> , 2021 , 413, 127446	14.7	16
45	Easily Prepared and Reusable Films for Fast-Response Rewritable Light Printing. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 14322-14328	9.5	15
44	Thermo-responsive photoluminescent silver clusters/hydrogel nanocomposites for highly sensitive and selective detection of Cr(VI). <i>Journal of Materials Chemistry C</i> , 2018 , 6, 2088-2094	7.1	15
43	Adenine-mediated adhesive and tough hydrogel based on hybrid crosslinking. <i>European Polymer Journal</i> , 2018 , 106, 139-147	5.2	15
42	Salt-inactive hydrophobic association hydrogels with fatigue resistant and self-healing properties. <i>Polymer</i> , 2018 , 150, 194-203	3.9	15
41	Graphene assisted ion-conductive hydrogel with super sensitivity for strain sensor. <i>Polymer</i> , 2021 , 215, 123340	3.9	15
40	Low-Temperature-Resistant Flexible Solid Supercapacitors Based on Organohydrogel Electrolytes and Microvoid-Incorporated Reduced Graphene Oxide Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 12432-12441	9.5	13
39	Enhancing the self-recovery and mechanical property of hydrogels by macromolecular microspheres with thermal and redox initiation systems. <i>RSC Advances</i> , 2017 , 7, 16015-16021	3.7	12
38	An amylopectin-enabled skin-mounted hydrogel wearable sensor. <i>Journal of Materials Chemistry B</i> , 2021 , 9, 1082-1088	7.3	12
37	Effect of Entanglement Density on Mechanical Properties and Deformation Behavior of Rubber-Modified PVC/EMSAN Blends. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 12567-12573	3.9	11
36	Polysaccharide-tackified composite hydrogel for skin-attached sensors. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 3343-3351	7.1	11

35	A highly conductive hydrogel driven by phytic acid towards a wearable sensor with freezing and dehydration resistance. <i>Journal of Materials Chemistry A</i> ,	13	11
34	Multipurpose and Durable Adhesive Hydrogel Assisted by Adenine and Uracil from Ribonucleic Acid. <i>Chemistry - A European Journal</i> , 2018 , 24, 15119-15125	4.8	10
33	Gelatin/PVA composited photochromic film for light printing with fast rewritability and long-term storage ability. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 12518-12522	7.1	10
32	Protein-assisted freeze-tolerant hydrogel with switchable performance toward customizable flexible sensor. <i>Chemical Engineering Journal</i> , 2022 , 428, 131171	14.7	10
31	An environment-stable hydrogel with skin-matchable performance for human-machine interface. <i>Science China Materials</i> , 2021 , 64, 2313-2324	7.1	9
30	Photo-writing self-erasable phosphorescent images using poly(N-vinyl-2-pyrrolidone) as a photochemically deoxygenating matrix. <i>Chemical Communications</i> , 2019 , 55, 4299-4302	5.8	9
29	Highly transparent and stretchable hydrogels with rapidly responsive photochromic performance for UV-irradiated optical display devices. <i>Reactive and Functional Polymers</i> , 2019 , 138, 88-95	4.6	8
28	Tough hydrogel based on covalent crosslinking and ionic coordination from ferric iron and negative carboxylic groups. <i>European Polymer Journal</i> , 2018 , 106, 297-304	5.2	8
27	Muscle-Inspired Anisotropic Hydrogel Strain Sensors.. <i>ACS Applied Materials & Interfaces</i> , 2021 ,	9.5	8
26	Robust and anti-fatigue hydrophobic association hydrogels assisted by titanium dioxide for photocatalytic activity. <i>Soft Matter</i> , 2019 , 15, 3897-3905	3.6	7
25	Self-healing carrageenan-driven Polyacrylamide hydrogels for strain sensing. <i>Science China Technological Sciences</i> , 2020 , 63, 2677-2686	3.5	7
24	Fundamentals of composites containing fibrous materials and hydrogels: A review on design and development for food applications. <i>Food Chemistry</i> , 2021 , 364, 130329	8.5	7
23	Mechanical Property of Hydrogels Regulated by Different Ratios of Latex Particles and Hydrophobic Segments. <i>ChemistrySelect</i> , 2018 , 3, 4562-4568	1.8	6
22	Regulatable Thermochromic Hydrogels via Hydrogen Bonds Driven by Potassium Tartrate Hemihydrate. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 15036-15043	8.3	6
21	Different deformation mechanisms of two modified-polystyrene bimodal systems. <i>Polymer International</i> , 2010 , 59, n/a-n/a	3.3	6
20	Characterization of UV-curable poly(ethylene glycol) diacrylate based hydrogels. <i>Chemical Research in Chinese Universities</i> , 2015 , 31, 1046-1050	2.2	5
19	Nucleotide-Tackified Organohydrogel Electrolyte for Environmentally Self-Adaptive Flexible Supercapacitor with Robust Electrolyte/Electrode Interface. <i>Small</i> , 2021 , 17, e2103091	11	5
18	Ultrathin and Highly Tough Hydrogel Films for Multifunctional Strain Sensors. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 50411-50421	9.5	5

17	Ultra-thin, transparent, anti-freezing organohydrogel film responded to a wide range of humidity and temperature. <i>Chemical Engineering Journal</i> , 2022 , 430, 132919	14.7	5
16	Protein and Hydrophobic Association-Regulated Hydrogels with Adhesive Adjustability in Different Materials. <i>Advanced Materials Interfaces</i> , 2020 , 7, 1901541	4.6	5
15	Underwater flexible mechanoreceptors constructed by anti-swelling self-healable hydrogel. <i>Science China Materials</i> , ¹	7.1	5
14	Co-toughened Polystyrene by Submicrometer-Sized Core-Shell Rubber Particles and Micrometer-Sized Salami Rubber Particles. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 5079-5084	3.9	4
13	A bio-inspired self-recoverable polyampholyte hydrogel with low temperature sensing. <i>Journal of Materials Chemistry B</i> , 2021 , 9, 2010-2015	7.3	4
12	Preparation and application of graphene-based wearable sensors. <i>Nano Research</i> ,	10	4
11	A Stimuli-Responsive Hydrogel with Reversible Three-State Transition Controlled by Redox Stimulation. <i>Macromolecular Chemistry and Physics</i> , 2017 , 218, 1700002	2.6	3
10	Amylopectin based hydrogel strain sensor with good biocompatibility, high toughness and stable anti-swelling in multiple liquid media. <i>European Polymer Journal</i> , 2022 , 164, 110981	5.2	3
9	Ionic conductive hydrogels toughened by latex particles for strain sensors. <i>Science China Technological Sciences</i> , 2021 , 64, 827-835	3.5	3
8	Flexible and wearable strain sensors based on conductive hydrogels. <i>Journal of Polymer Science</i> ,	2.4	3
7	Synthesis of sub-micrometer core-shell rubber particles with 1,2-azobisisobutyronitrile as initiator and deformation mechanisms of modified polystyrene under various conditions. <i>Polymer International</i> , 2009 , 58, 1196-1201	3.3	2
6	Compressible piezoresistive pressure sensor based on Ag nanowires wrapped conductive carbonized melamine foam. <i>Applied Physics A: Materials Science and Processing</i> , 2022 , 128, 1	2.6	2
5	A 3D honeycomb graphene structure for wearable piezoresistive pressure sensor with high sensitivity. <i>Journal of Materials Science: Materials in Electronics</i> , ¹	2.1	1
4	Accelerated Redox Conversion by CoMoS ₃ /CoS Synergistic Interactions for High-Performance Lithium Sulfur Batteries. <i>Journal of Electroanalytical Chemistry</i> , 2022 , 116025	4.1	1
3	A self-adhesive strain sensor based on the synergy of metal complexation and chemical cross-linking. <i>Polymer</i> , 2022 , 124830	3.9	0
2	Toughening Mechanism of Hydrophobic Association Hydrogels Reinforced by Latex Particles. <i>Macromolecular Materials and Engineering</i> , 2019 , 304, 1900151	3.9	
1	The effect of methyl group on the mechanical properties of hydrophobic association hydrogel. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2018 , 56, 1505-1512	2.6	