

# Qiang Chen

## List of Publications by Citations

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

102 papers	4,606 citations	34 h-index	66 g-index
107 ext. papers	5,633 ext. citations	7.2 avg, IF	5.82 L-index

#	Paper	IF	Citations
102	A robust, one-pot synthesis of highly mechanical and recoverable double network hydrogels using thermoreversible sol-gel polysaccharide. <i>Advanced Materials</i> , <b>2013</b> , 25, 4171-6	24	485
101	A Novel Design Strategy for Fully Physically Linked Double Network Hydrogels with Tough, Fatigue Resistant, and Self-Healing Properties. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 1598-1607	15.6	411
100	Fundamentals of double network hydrogels. <i>Journal of Materials Chemistry B</i> , <b>2015</b> , 3, 3654-3676	7.3	329
99	Effect of acetylation on the properties of corn starch. <i>Food Chemistry</i> , <b>2008</b> , 106, 923-928	8.5	251
98	Improvement of Mechanical Strength and Fatigue Resistance of Double Network Hydrogels by Ionic Coordination Interactions. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 5710-5720	9.6	176
97	A Novel Design of Multi-Mechanoresponsive and Mechanically Strong Hydrogels. <i>Advanced Materials</i> , <b>2017</b> , 29, 1606900	24	156
96	A Temperature-Responsive Copolymer Hydrogel in Controlled Drug Delivery. <i>Macromolecules</i> , <b>2006</b> , 39, 6584-6589	5.5	153
95	Super Bulk and Interfacial Toughness of Physically Crosslinked Double-Network Hydrogels. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1703086	15.6	126
94	Tough, Stretchable, Compressive Novel Polymer/Graphene Oxide Nanocomposite Hydrogels with Excellent Self-Healing Performance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 38052-38061	9.5	122
93	A Highly Elastic and Reversibly Stretchable All-Polymer Supercapacitor. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 15707-15711	16.4	122
92	Fracture of the Physically Cross-Linked First Network in Hybrid Double Network Hydrogels. <i>Macromolecules</i> , <b>2014</b> , 47, 2140-2148	5.5	108
91	High strength and self-healable gelatin/polyacrylamide double network hydrogels. <i>Journal of Materials Chemistry B</i> , <b>2017</b> , 5, 7683-7691	7.3	105
90	Simultaneous Enhancement of Stiffness and Toughness in Hybrid Double-Network Hydrogels via the First, Physically Linked Network. <i>Macromolecules</i> , <b>2015</b> , 48, 8003-8010	5.5	100
89	Engineering of Tough Double Network Hydrogels. <i>Macromolecular Chemistry and Physics</i> , <b>2016</b> , 217, 1022-1036	2.6	95
88	Molecular Understanding and Structural-Based Design of Polyacrylamides and Polyacrylates as Antifouling Materials. <i>Langmuir</i> , <b>2016</b> , 32, 3315-30	4	74
87	Electrostatically Assembling 2D Nanosheets of MXene and MOF-Derivatives into 3D Hollow Frameworks for Enhanced Lithium Storage. <i>Small</i> , <b>2019</b> , 15, e1904255	11	73
86	From design to applications of stimuli-responsive hydrogel strain sensors. <i>Journal of Materials Chemistry B</i> , <b>2020</b> , 8, 3171-3191	7.3	72

85	Synthesis and characterization of pH-sensitive poly(N-2-hydroxyethyl acrylamide)-acrylic acid (poly(HEAA/AA)) nanogels with antifouling protection for controlled release. <i>Soft Matter</i> , <b>2012</b> , 8, 7848	3.6	68
84	General Principle for Fabricating Natural Globular Protein-Based Double-Network Hydrogels with Integrated Highly Mechanical Properties and Surface Adhesion on Solid Surfaces. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 179-189	9.6	68
83	Probing structure-antifouling activity relationships of polyacrylamides and polyacrylates. <i>Biomaterials</i> , <b>2013</b> , 34, 4714-24	15.6	67
82	Mechanically strong hybrid double network hydrogels with antifouling properties. <i>Journal of Materials Chemistry B</i> , <b>2015</b> , 3, 5426-5435	7.3	66
81	Salt-responsive polyzwitterionic materials for surface regeneration between switchable fouling and antifouling properties. <i>Acta Biomaterialia</i> , <b>2016</b> , 40, 62-69	10.8	64
80	General Strategy To Fabricate Strong and Tough Low-Molecular-Weight Gelator-Based Supramolecular Hydrogels with Double Network Structure. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 1743-1754	9.6	60
79	Synthesis and characterization of antifouling poly(N-acryloylaminoethoxyethanol) with ultralow protein adsorption and cell attachment. <i>Langmuir</i> , <b>2014</b> , 30, 10398-409	4	56
78	A novel multi-responsive polyampholyte composite hydrogel with excellent mechanical strength and rapid shrinking rate. <i>Journal of Colloid and Interface Science</i> , <b>2010</b> , 345, 360-8	9.3	53
77	Polyaniline-Decorated Supramolecular Hydrogel with Tough, Fatigue-Resistant, and Self-Healable Performances for All-In-One Flexible Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 9736-9745	9.5	52
76	Flexible and low temperature resistant double network alkaline gel polymer electrolyte with dual-role KOH for supercapacitor. <i>Journal of Power Sources</i> , <b>2019</b> , 414, 201-209	8.9	52
75	Mechanical properties of gelatin/polyacrylamide/graphene oxide nanocomposite double-network hydrogels. <i>Composites Science and Technology</i> , <b>2018</b> , 163, 81-88	8.6	51
74	Study on the synthesis and performance of hydrogels with ionic monomers and montmorillonite. <i>Applied Clay Science</i> , <b>2007</b> , 38, 139-145	5.2	45
73	Conductive regenerated silk-fibroin-based hydrogels with integrated high mechanical performances. <i>Journal of Materials Chemistry B</i> , <b>2019</b> , 7, 1708-1715	7.3	44
72	A comparative study of the mechanical properties of hybrid double-network hydrogels in swollen and as-prepared states. <i>Journal of Materials Chemistry B</i> , <b>2016</b> , 4, 5814-5824	7.3	44
71	The energy dissipation and Mullins effect of tough polymer/graphene oxide hybrid nanocomposite hydrogels. <i>Polymer Chemistry</i> , <b>2017</b> , 8, 4659-4672	4.9	38
70	Semicrystalline Hydrophobically Associated Hydrogels with Integrated High Performances. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 2946-2956	9.5	36
69	Polyampholytes superabsorbent nanocomposites with excellent gel strength. <i>Composites Science and Technology</i> , <b>2007</b> , 67, 3480-3486	8.6	34
68	Synthesis and aqueous solution properties of hydrophobically modified anionic acrylamide copolymers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2008</b> , 46, 2465-2474	2.6	34

67	Recent Advances in Design of Flexible Electrodes for Miniaturized Supercapacitors. <i>Small Methods</i> , <b>2020</b> , 4, 1900824	12.8	34
66	Spontaneous volume transition of polyampholyte nanocomposite hydrogels based on pure electrostatic interaction. <i>Journal of Colloid and Interface Science</i> , <b>2008</b> , 321, 272-8	9.3	31
65	Scalable preparation of high performance fibrous electrodes with bio-inspired compact core-fluffy sheath structure for wearable supercapacitors. <i>Carbon</i> , <b>2020</b> , 157, 106-112	10.4	31
64	Preparation and Characterization of PVA Alkaline Solid Polymer Electrolyte with Addition of Bamboo Charcoal. <i>Materials</i> , <b>2018</b> , 11,	3.5	28
63	Fabrication and mechanical behaviors of novel supramolecular/polymer hybrid double network hydrogels. <i>Polymer</i> , <b>2019</b> , 168, 159-167	3.9	27
62	Microstructure Design of Carbonaceous Fibers: A Promising Strategy toward High-Performance Weaveable/Wearable Supercapacitors. <i>Small</i> , <b>2020</b> , 16, e2000653	11	26
61	Chitosan inhibits fibroblasts growth in Achilles tendon via TGF- $\beta$ /Smad3 pathway by miR-29b. <i>International Journal of Clinical and Experimental Pathology</i> , <b>2014</b> , 7, 8462-70	1.4	23
60	Identifying the active site of ultrathin NiCo LDH as an efficient peroxidase mimic with superior substrate affinity for sensitive detection of hydrogen peroxide. <i>Journal of Materials Chemistry B</i> , <b>2019</b> , 7, 6232-6237	7.3	22
59	Flexible and low temperature resistant semi-IPN network gel polymer electrolyte membrane and its application in supercapacitor. <i>Journal of Membrane Science</i> , <b>2020</b> , 597, 117740	9.6	22
58	Multiple Physical Cross-Linker Strategy To Achieve Mechanically Tough and Reversible Properties of Double-Network Hydrogels in Bulk and on Surfaces. <i>ACS Applied Polymer Materials</i> , <b>2019</b> , 1, 701-713	4.3	22
57	A Highly Elastic and Reversibly Stretchable All-Polymer Supercapacitor. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 15854-15858	3.6	21
56	Multifunctional supramolecular gel polymer electrolyte for self-healable and cold-resistant supercapacitor. <i>Journal of Power Sources</i> , <b>2020</b> , 474, 228602	8.9	21
55	Preparation and characterization of interpenetration polymer network films based on poly(vinyl alcohol) and poly(acrylic acid) for drug delivery. <i>Journal of Applied Polymer Science</i> , <b>2008</b> , 108, 3836-3842	2.9	19
54	Transforming non-adhesive hydrogels to reversible tough adhesives via mixed-solvent-induced phase separation. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 9706-9718	13	19
53	Controlled shape deformation of bilayer films with tough adhesion between nanocomposite hydrogels and polymer substrates. <i>Journal of Materials Chemistry B</i> , <b>2018</b> , 6, 6629-6636	7.3	18
52	Double network hydrogels with controlled shape deformation: A mini review. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2018</b> , 56, 1351-1362	2.6	17
51	Fully physical double network hydrogels with high strength, rapid self-recovery and self-healing performances. <i>Polymer Testing</i> , <b>2018</b> , 69, 167-174	4.5	17
50	Solution-Processed Sensing Textiles with Adjustable Sensitivity and Linear Detection Range Enabled by Twisting Structure. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 12155-12164	9.5	15

49	Nanoclay Reinforced Self-Cross-Linking Poly(N-Hydroxyethyl Acrylamide) Hydrogels with Integrated High Performances. <i>Macromolecular Materials and Engineering</i> , <b>2018</b> , 303, 1800295	3.9	14
48	Preparation of polyacrylamide aqueous dispersions using poly(sodium acrylic acid) as stabilizer. <i>Journal of Applied Polymer Science</i> , <b>2009</b> , 113, 2693-2701	2.9	14
47	Ammonium Intercalation Induced Expanded 1T-Rich Molybdenum Diselenides for Improved Lithium Ion Storage. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 17459-17466	9.5	14
46	Tough and conductive nanocomposite hydrogels for human motion monitoring. <i>Polymer Testing</i> , <b>2019</b> , 75, 38-47	4.5	13
45	Hybrid nanocomposite hydrogels with high strength and excellent self-recovery performance. <i>RSC Advances</i> , <b>2016</b> , 6, 59131-59140	3.7	13
44	Tough and Conductive Dual Physically Cross-Linked Hydrogels for Wearable Sensors. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 17001-17009	3.9	13
43	Mechanistic insight in site-selective and anisotropic etching of prussian blue analogues toward designable complex architectures for efficient energy storage. <i>Nanoscale</i> , <b>2020</b> , 12, 11112-11118	7.7	12
42	Preparation and characterization of poly (N-isopropylacrylamide)/polyvinylamine core-shell microgels. <i>Colloid and Polymer Science</i> , <b>2009</b> , 287, 1339-1346	2.4	12
41	Jahn-Teller distortions boost the ultrahigh areal capacity and cycling robustness of holey NiMn-hydroxide nanosheets for flexible energy storage devices. <i>Nanoscale</i> , <b>2020</b> , 12, 22075-22081	7.7	11
40	The incorporation of expanded 1T-enriched MoS <sub>2</sub> boosts hybrid fiber improved charge storage capability. <i>Carbon</i> , <b>2020</b> , 170, 543-549	10.4	11
39	Freezing-tolerant and robust gelatin-based supramolecular conductive hydrogels with double-network structure for wearable sensors. <i>Polymer Testing</i> , <b>2021</b> , 93, 106879	4.5	11
38	Natural protein-based hydrogels with high strength and rapid self-recovery. <i>International Journal of Biological Macromolecules</i> , <b>2019</b> , 141, 108-116	7.9	10
37	Hierarchically tubular architectures composed of vertical carbon nanosheets embedded with oxygen-vacancy enriched hollow Co <sub>3</sub> O <sub>4</sub> nanoparticles for improved energy storage. <i>Electrochimica Acta</i> , <b>2020</b> , 356, 136843	6.7	10
36	Mesh-like vertical structures enable both high areal capacity and excellent rate capability. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 53, 226-233	12	10
35	Recent Advances in Molybdenum-Based Materials for Lithium-Sulfur Batteries. <i>Research</i> , <b>2021</b> , 2021, 5130420	7.8	10
34	Artificial finger joint replacement due to a giant cell tumor of the tendon sheath with bone destruction: A case report. <i>Oncology Letters</i> , <b>2015</b> , 10, 3502-3504	2.6	9
33	Tough, Transparent, and Anti-Freezing Nanocomposite Organohydrogels with Photochromic Properties. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 31180-31192	9.5	8
32	Ultrathin NiMn layered double hydroxide nanosheets with a superior peroxidase mimicking performance to natural HRP for disposable paper-based bioassays. <i>Journal of Materials Chemistry B</i> , <b>2021</b> , 9, 983-991	7.3	8

31	Tough Interfacial Adhesion of Bilayer Hydrogels with Integrated Shape Memory and Elastic Properties for Controlled Shape Deformation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 10457-10466	8.5	8
30	Chitosan prevents adhesion during rabbit flexor tendon repair via the sirtuin 1 signaling pathway. <i>Molecular Medicine Reports</i> , <b>2015</b> , 12, 4598-4603	2.9	7
29	Pigmented villonodular synovitis of the elbow with rdial, median and ulnar nerve compression. <i>International Journal of Clinical and Experimental Pathology</i> , <b>2015</b> , 8, 14045-9	1.4	7
28	Fibroma of tendon sheath in planta. <i>SpringerPlus</i> , <b>2016</b> , 5, 575		6
27	Hamartoma compress medial and radial nerve in neurofibromatosis type 1. <i>International Journal of Clinical and Experimental Medicine</i> , <b>2015</b> , 8, 15313-6		6
26	A General Protein Unfolding-Chemical Coupling Strategy for Pure Protein Hydrogels with Mechanically Strong and Multifunctional Properties.. <i>Advanced Science</i> , <b>2021</b> , e2102557	13.6	6
25	High-Strength Albumin Hydrogels With Hybrid Cross-Linking. <i>Frontiers in Chemistry</i> , <b>2020</b> , 8, 106	5	5
24	Effectiveness and Complications of Improved Liposuction-Curettage Through Mini-Incisions for the Treatment of Axillary Osmidrosis. <i>Plastic Surgery</i> , <b>2017</b> , 25, 234-241	0.8	5
23	Recent Progress in Double Network Elastomers: One Plus One is Greater Than Two. <i>Advanced Functional Materials</i> , 2110244	15.6	5
22	The Jahn-Teller Effect for Amorphization of Molybdenum Trioxide towards High-Performance Fiber Supercapacitor. <i>Research</i> , <b>2021</b> , 2021, 6742715	7.8	5
21	Design of Vertically Aligned Two-Dimensional Heterostructures of Rigid TiCT MXene and Pliable Vanadium Pentoxide for Efficient Lithium Ion Storage.. <i>ACS Nano</i> , <b>2022</b> ,	16.7	5
20	Low Cationic Proportion Ampholytic Polymer: Synthesis, Solution Properties and Interaction with Anionic Surfactant. <i>Polymer Bulletin</i> , <b>2008</b> , 60, 545-554	2.4	4
19	Near-infrared responsive shape memory hydrogels with programmable and complex shape-morphing. <i>Science China Technological Sciences</i> , <b>2021</b> , 64, 1752-1764	3.5	4
18	Flexible, Water-Resistant and Air-Stable LiBH Nanoparticles Loaded Melamine Foam With Improved Dehydrogenation. <i>Frontiers in Chemistry</i> , <b>2020</b> , 8, 45	5	3
17	Designing Tubular Architectures Composed of Hollow N-Doped Carbon Polyhedrons for Improved Supercapacitance. <i>Advanced Materials Interfaces</i> , <b>2021</b> , 8, 2100805	4.6	3
16	Strong, tough, anti-freezing, non-drying and sensitive ionic sensor based on fully physical cross-linked double network hydrogel. <i>Materials Science and Engineering C</i> , <b>2021</b> , 130, 112452	8.3	3
15	Hydrogels: A Novel Design of Multi-Mechanoresponsive and Mechanically Strong Hydrogels (Adv. Mater. 21/2017). <i>Advanced Materials</i> , <b>2017</b> , 29,	24	2
14	Inflammatory myofibroblastic tumor of the hand: A case report. <i>Oncology Letters</i> , <b>2015</b> , 9, 2548-2550	2.6	2

13	Preparation and characterization of nanostructured and high transparent hydrogel films with pH sensitivity and application. <i>Journal of Applied Polymer Science</i> , <b>2009</b> , 112, 2261-2269	2.9	2
12	Three different methods for treating multiple enchondromatosis in one hand. <i>International Journal of Clinical and Experimental Medicine</i> , <b>2015</b> , 8, 13417-20		2
11	Effect of Graphite Oxide Dispersion Evaluated with Multifractal on Mechanical Properties and Thermal Stability of Poly(3hydroxybutyrate-co -4hydroxybutyrate)/Graphite Oxide Biocomposites. <i>Advances in Polymer Technology</i> , <b>2018</b> , 37, 376-383	1.9	1
10	Phase behavior and self-assembly of poly[N-vinylformamide-co-(acrylic acid)] copolymers under highly acidic conditions. <i>Journal of Applied Polymer Science</i> , <b>2008</b> , 109, 2802-2807	2.9	1
9	Non-Alcoholic Fatty Liver Disease and Hypokalemia in Primary Aldosteronism Among Chinese Population. <i>Frontiers in Endocrinology</i> , <b>2021</b> , 12, 565714	5.7	1
8	A rare atypical rapidly involuting congenital hemangioma combined with vascular malformation in the upper limb. <i>World Journal of Surgical Oncology</i> , <b>2016</b> , 14, 229	3.4	1
7	Tough, Instant, and Repeatable Adhesion of Self-Healable Elastomers to Diverse Soft and Hard Surfaces.. <i>Advanced Science</i> , <b>2022</b> , e2105742	13.6	1
6	Wet-Chemistry: A Useful Tool for Deriving MetalOrganic Frameworks toward Supercapacitors and Secondary Batteries. <i>Advanced Materials Interfaces</i> , 2102595	4.6	1
5	Preparation of PVA-based composite alkaline solid polymer electrolyte with La2O3 nanoparticle filler. <i>Journal of Nanoparticle Research</i> , <b>2021</b> , 23, 1	2.3	0
4	2D material-based peroxidase-mimicking nanozymes: catalytic mechanisms and bioapplications.. <i>Analytical and Bioanalytical Chemistry</i> , <b>2022</b> , 414, 2971	4.4	0
3	Tough and redox-mediated alkaline gel polymer electrolyte membrane for flexible supercapacitor with high energy density and low temperature resistance. <i>Journal of Membrane Science</i> , <b>2022</b> , 650, 120386	8.6	0
2	Chest wall metastasis in postoperative thyroid cancer: a case report. <i>Journal of International Medical Research</i> , <b>2019</b> , 47, 4039-4042	1.4	
1	Clinical analysis of hyperkalemia after esophagectomy: A case report. <i>Medicine (United States)</i> , <b>2017</b> , 96, e8966	1.8	